

=>'FILE HCAPLUS

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FILE LAST UPDATED: 30 Jul 1999 (19990730/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

Compounds from Table I

=> D QUE L73

L1	1	SEA FILE=LREGISTRY ABB=ON	STEARYL ALCOHOL/CN
L2	1	SEA FILE=LREGISTRY ABB=ON	"DIETHYLENE GLYCOL MONOMETHYL ETHER"/CN
L3	1	SEA FILE=LREGISTRY ABB=ON	"DIETHYLENE GLYCOL MONOETHYL ETHER"/CN
L4	1	SEA FILE=LREGISTRY ABB=ON	2-ETHYL-1-HEXANOL/CN
L5	1	SEA FILE=LREGISTRY ABB=ON	TETRAHYDROFURFURYL ALCOHOL/CN
L7	1	SEA FILE=LREGISTRY ABB=ON	"2,2-DIMETHYLPROPYL ALCOHOL"/CN
L8	1	SEA FILE=LREGISTRY ABB=ON	2-PHENOXYETHANOL/CN
L9	1	SEA FILE=LREGISTRY ABB=ON	N-HEXANOL/CN
L10	1	SEA FILE=LREGISTRY ABB=ON	OLEYL ALCOHOL/CN
L11	1	SEA FILE=LREGISTRY ABB=ON	DIETHYLENE GLYCOL/CN
L12	1	SEA FILE=LREGISTRY ABB=ON	"TRIS(2-HYDROXYETHYL) ISOCYANURATE"/CN
L13	1	SEA FILE=LREGISTRY ABB=ON	STEARIC ACID/CN
L14	1	SEA FILE=LREGISTRY ABB=ON	2-ETHYLHEXANOIC ACID/CN
L15	1	SEA FILE=LREGISTRY ABB=ON	BENZOIC ACID/CN
L16	1	SEA FILE=LREGISTRY ABB=ON	ACETAMIDE/CN
L20	1	SEA FILE=LREGISTRY ABB=ON	6-UNDECANONE/CN
L25	1	SEA FILE=LREGISTRY ABB=ON	2-TRIDECANONE/CN
L26	1	SEA FILE=LREGISTRY ABB=ON	"P-TOLUENESULFONIC ACID"/CN
L27	1	SEA FILE=LREGISTRY ABB=ON	CAPROLACTAM/CN
L28	1	SEA FILE=LREGISTRY ABB=ON	UREA/CN
L29	1	SEA FILE=LREGISTRY ABB=ON	"OLEYL ALCOHOL"/CN
L31	20	SEA FILE=REGISTRY ABB=ON	(L1 OR L2 OR L3 OR L4 OR L5) OR (L7 OR L8 OR L9 OR L10 OR L11 OR L12 OR L13 OR L14 OR L15 OR L16) OR L20 OR L25 OR L26 OR (L27 OR L28 OR L29)
L32	25	SEA FILE=REGISTRY ABB=ON	C35H700/MF
L33	10	SEA FILE=REGISTRY ABB=ON	L32 AND ONE
L35	1	SEA FILE=REGISTRY ABB=ON	L33 AND 18 (W) PENTATRIACON?
L37	1	SEA FILE=REGISTRY ABB=ON	"BENZENESULFONAMIDE, N-BUTYL-4-METHYL -"/CN
L38	1	SEA FILE=REGISTRY ABB=ON	"BENZENESULFONAMIDE, N-ETHYL-4-METHYL -"/CN
L39	1	SEA FILE=REGISTRY ABB=ON	"BENZYL ETHYL ETHER"/CN
L40	1	SEA FILE=REGISTRY ABB=ON	"ETHYL HEXYL ETHER"/CN
L46	2521	SEA FILE=REGISTRY ABB=ON	C10H13NO2/MF
L47	516	SEA FILE=REGISTRY ABB=ON	L46 AND 1/NR AND ETHYL

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L48 16 SEA FILE=REGISTRY ABB=ON L47 AND CARBAMATE
 L49 2 SEA FILE=REGISTRY ABB=ON L48 AND PHENYLMETHYL
 L50 1 SEA FILE=REGISTRY ABB=ON L49 AND ETHYL(W)ESTER
 L51 26 SEA FILE=REGISTRY ABB=ON L31 OR L35 OR L37 OR L38 OR L39 OR
 L40 OR L50
 L52 136470 SEA FILE=HCAPLUS ABB=ON L51
 L53 929 SEA FILE=HCAPLUS ABB=ON L52 AND PHOTSENSIT?
 L54 479 SEA FILE=HCAPLUS ABB=ON L53 AND (RESIN# OR POLYMER#)
 L55 318 SEA FILE=HCAPLUS ABB=ON L54 AND COMPOSITI?
 L57 73 SEA FILE=HCAPLUS ABB=ON L55 AND (WT OR WEIGHT)
 L58 1 SEA FILE=HCAPLUS ABB=ON L55 AND (WT OR WEIGHT) (5A)RANGE?
 L59 0 SEA FILE=HCAPLUS ABB=ON L55 AND (WT OR WEIGHT) (5A)001
 L60 1 SEA FILE=HCAPLUS ABB=ON L55 AND (WT OR WEIGHT) (S)RANGE?
 L61 2977 SEA FILE=HCAPLUS ABB=ON L52(L) (WT OR WEIGHT)
 L62 2 SEA FILE=HCAPLUS ABB=ON L55 AND L61
 L63 3293 SEA FILE=HCAPLUS ABB=ON L52(L)TEM/RL
 L64 17 SEA FILE=HCAPLUS ABB=ON L55 AND L63
 L65 35 SEA FILE=HCAPLUS ABB=ON L55 AND (NEG OR NEGATIVE?)
 L66 9 SEA FILE=HCAPLUS ABB=ON L65 AND L57
 L67 2 SEA FILE=HCAPLUS ABB=ON L55 AND "001"
 L71 4 SEA FILE=HCAPLUS ABB=ON L55 AND "04"
 L72 0 SEA FILE=HCAPLUS ABB=ON L55 AND "047"
 L73 34 SEA FILE=HCAPLUS ABB=ON (L58 OR L59 OR L60) OR L62 OR L64 OR
 L66 OR L67 OR L71 OR L72

=> D L73 1-34 BIB ABS IND HITSTR

L73 ANSWER 1 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1999:355686 HCAPLUS

DN 131:11543

TI **Photosensitive resin composition**

IN Kosaka, Eiji; Murakami, Shigeru

PA Nichigo Morton Co Ltd, Japan

SO Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 919870	A1	19990602	EP 98-309562	19981123
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 11167203	A2	19990622	JP 97-347112	19971201
PRAI	JP 97-347112		19971201		

AB A **photosensitive resin compn.** with excellent sensitivity and adhesion as well as high resoln. and plating resistance comprises (A) a **polymer** contg. carboxyl groups, (B) a compd. contg. at least one ethylene-based unsatd. group in the mol., and (C) a photopolymn. initiator. Component (B) contains at least 60 wt.% of methacrylate, contg. at least one ethylene-based unsatd. group, with respect to the total amt. of component (B). The amt. of component (C) is in the **range** of 0.01-20 wt. parts per 100 wt. parts of components (A) and (B), and component (C) contains 2-5 wt. parts of a lophine dimer and 0.1-2.0 wt. parts of triphenylphosphine per 100 wt. parts of components (A) and (B).

IC ICM G03F007-027

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photosensitive compn** adhesive photoresist solder mask; carboxyl **polymer** photoresist solder mask

IT Photoresists

(contg. carboxyl group-contg. **polymers**, ethylenically unsatd.

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compds., and photopolymer. initiators)

IT Solder resists
(photopolymerizable compns. contg. carboxyl group-contg. **polymers** and ethylenically unsatd. compds. for)

IT Photoimaging materials
(photopolymerizable; contg. carboxyl group-contg. **polymers** and ethylenically unsatd. compds.)

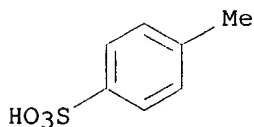
IT 38056-88-1 41637-38-1, Ethoxylated Bisphenol A dimethacrylate
45314-30-5, Nonaethylene glycol dimethacrylate 57491-53-9, Nonaethylene glycol diacrylate 209273-29-0 225643-17-4
RL: TEM (Technical or engineered material use); USES (Uses)
(photopolymerizable compns. for resist pattern formation contg. carboxyl group-contg. **polymers** and)

IT 88-99-3, 1,2-Benzenedicarboxylic acid, uses 90-93-7, 4,4'-Diethylaminobenzophenone **104-15-4**, p-Toluenesulfonic acid, uses 119-61-9, Benzophenone, uses 569-64-2, Malachite green 602-56-2, 9-Phenylacridine 603-35-0, Triphenylphosphine, uses 603-48-5, Leuco crystal violet 1707-68-2, 2,2'-Bis(o-chlorophenyl)-4,5,4',5'-tetraphenyl-1,1'-biimidazole
RL: TEM (Technical or engineered material use); USES (Uses)
(photopolymerizable compns. for resist pattern formation contg. carboxyl group-contg. **polymers**, ethylenically unsatd. compds. and)

IT 25035-89-6, Butyl acrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate copolymer 25085-34-1, Acrylic acid-styrene copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(photopolymerizable compns. for resist pattern formation contg. ethylenically unsatd. compds. and)

IT **104-15-4**, p-Toluenesulfonic acid, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(photopolymerizable compns. for resist pattern formation contg. carboxyl group-contg. **polymers**, ethylenically unsatd. compds. and)

RN 104-15-4 HCAPLUS
CN Benzenesulfonic acid, 4-methyl- (9CI) (CA INDEX NAME)



L73 ANSWER 2 OF 34 HCAPLUS COPYRIGHT 1999 ACS
AN 1999:193911 HCAPLUS
DN 130:215897
TI Positive **photosensitive composition** for use with infrared laser
IN Kawauchi, Ikuo; Kimura, Takeshi
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 43 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 901902	A2	19990317	EP 98-117286	19980911
	EP 901902	A3	19990324		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

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JP 11084657 A2 19990326 JP 97-248889 19970912
PRAI JP 97-248889 19970912
JP 97-259703 19970925
JP 98-132365 19980514
JP 98-229099 19980813
OS MARPAT 130:215897
AB A pos. **photosensitive compn.** for use with an IR laser
for prepg. a lithog. plate comprises at least one aq. alkali soln.-sol.
polymer (A) having at least one group selected from phenolic
hydroxy groups, sulfonamido groups, and active imido groups, a compd.
which has an I/O value (a measure of hydrophilicity and hydrophobicity) of
Y satisfying the relationship $0.05 \leq X/Y \leq 0.5$ wherein X is an
I/O value for the **polymer** A and which is compatible with the
polymer A, thereby lowering the soly. of the **polymer** A
in an aq. alkali soln., the effect of lowering the soly. being reduced by
heating, and a compd. which generates heat upon absorbing light. The
photosensitive compn. does not contain any compd. having
a thermal decompn. temp. of 150.degree. or less. Alternatively, the
photosensitive compn. may comprise a compd. which
generates heat upon absorbing light, an aq. alkali soln.-sol.
polymer having a phenolic hydroxy group, and a compd. represented
by R_1COXR_2 wherein X represents O, S, or NR₃, R₁ represents an alkyl or
alkenyl group which has 6-32 carbon atoms, R₂ and R₃ each represents a
hydrogen atom or an alkyl, alkenyl, or aryl group which has 1-18 carbon
atoms.
IC ICM B41C001-10
ICS B41M005-36
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
ST pos **photosensitive compn** IR lithog plate
IT Lithographic plates
(pos. IR-sensitive **photosensitive** compns. contg. aq. alkali
soln.-sol. **polymers** for prepn. of)
IT Photoimaging materials
(pos. IR-sensitive; contg. aq. alkali soln.-sol. **polymers** for
lithog. plate prepn.)
IT 57-11-4, Stearic acid, uses 112-85-6, Behenic acid 123-95-5,
Butyl stearate 127-63-9, Diphenyl sulfone 334-48-5, Capric acid
637-55-8, Phenyl stearate 3061-75-4, Behenic amide 5303-25-3, Dodecyl
stearate 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer
69415-30-1 71284-81-6 134127-48-3 220874-64-6 220874-66-8
220874-68-0
RL: **TEM (Technical or engineered material use); USES (Uses)**
(pos. IR-sensitive **photosensitive** compns. for lithog. plate
prepn. contg.)
IT 124996-93-6P, N-(p-Aminosulfonylphenyl)methacrylamide-acrylonitrile-ethyl
methacrylate copolymer 220874-62-4P, N-(p-Hydroxyphenyl)methacrylamide-
acrylonitrile-ethyl methacrylate copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(prepn. and use in pos. IR-sensitive **photosensitive** compns.
for lithog. plate prepn.)
IT 57-11-4, Stearic acid, uses
RL: **TEM (Technical or engineered material use); USES (Uses)**
(pos. IR-sensitive **photosensitive** compns. for lithog. plate
prepn. contg.)
RN 57-11-4 HCAPLUS
CN Octadecanoic acid (9CI) (CA INDEX NAME)

HO₂C-(CH₂)₁₆-Me

L73 ANSWER 3 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1998:344423 HCAPLUS

DN 129:21496

TI **Photosensitive composition**

IN Kawamura, Koichi; Watanabe, Noriaki

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 76 pp.

CODEN: EPXXDW

DT Patent

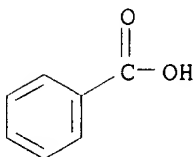
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 843218	A1	19980520	EP 97-119923	19971113
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 10142778	A2	19980529	JP 96-303354	19961114
	JP 10161303	A2	19980619	JP 96-316517	19961127
	JP 10186640	A2	19980714	JP 96-343740	19961224
	JP 10186642	A2	19980714	JP 96-348526	19961226
PRAI	JP 96-303354		19961114		
	JP 96-316517		19961127		
	JP 96-343740		19961224		
	JP 96-348526		19961226		
AB	Disclosed is a pos.-working photosensitive compn. suited for lithog. plate prepn. comprising a specific fluorine-contg. copolymer. The pos. working photosensitive compn. has not only an ability to form a highly contrasty image but also an ability to inhibit halation, a satisfactory safe light tolerance and a wide development latitude, without lowering the sensitivity.				
IC	ICM G03F007-023				
	ICS G03F007-004				
CC	74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
ST	pos photoimaging compn lithog plate fluoropolymer				
IT	Photoimaging materials (contg. fluorine-contg. copolymers for manuf. of lithog. plates)				
IT	Fluoropolymers, uses RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses) (lithog. plate prepn. from pos. photoimaging compns. contg.)				
IT	Lithographic plates (photosensitive compns. contg. fluorine-contg. copolymers for manuf. of)				
IT	Phenolic resins RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses) (novolak, novolak; lithog. plate prepn. from pos. photoimaging compns. contg. fluoropolymers and)				
IT	207792-86-7	207792-93-6	207792-95-8	207792-97-0	207792-98-1
	207792-99-2	207793-00-8	207793-01-9		
	RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses) (lithog. plate prepn. from pos. photoimaging compns. contg.)				
IT	65-85-0 , Benzoic acid, uses 85-43-8 87-66-1, Pyrogallol 9086-40-2, Formaldehyde-octylphenol copolymer 25086-36-6, m-Cresol-formaldehyde copolymer 38333-84-5, Acetone-pyrogallol copolymer 68510-93-0 68584-99-6 115168-59-7, 4-[p-N,N-Bis(ethoxycarbonylmethyl)aminophenyl]-2,6-bis(trichloromethyl)-s-triazine 117283-53-1 153273-61-1 207793-03-1 207793-05-3 207793-07-5 207793-09-7 207793-10-0 207793-12-2 207793-14-4 RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses) (lithog. plate prepn. from pos. photoimaging compns. contg.)				

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fluoropolymers and)
 IT 9003-35-4, Formaldehyde-phenol copolymer 9016-83-5, Cresol-formaldehyde copolymer
 RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
 (novolak; lithog. plate prepn. from pos. photoimaging compns. contg. fluoropolymers and)
 IT 207792-85-6P 207792-88-9P 207792-89-0P 207792-91-4P
 RL: DEV (Device component use); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (prepn. and use in pos. photoimaging compns. for lithog. plate prepn.)
 IT 65-85-0, Benzoic acid, uses
 RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
 (lithog. plate prepn. from pos. photoimaging compns. contg. fluoropolymers and)
 RN 65-85-0 HCAPLUS
 CN Benzoic acid (7CI, 8CI, 9CI) (CA INDEX NAME)



L73 ANSWER 4 OF 34 HCAPLUS COPYRIGHT 1999 ACS
 AN 1998:184467 HCAPLUS
 DN 128:277142
 TI **Photosensitive resin composition** useful in
 production of flexographic printing plate
 IN Kawahara, Keizo; Watanabe, Osamu; Imahashi, Satoshi
 PA Toyobo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10078657	A2	19980324	JP 96-233494	19960903
AB	Title compn. contains (a) a hydrophobic polymer having a glass transition temp. of .ltoreq.5.degree., (b) a hydrophilic polymer , (c) an ethylenically unsatd. compd., (d) a compd. having m.p. 40-200.degree., and (e) a photopolymn. initiator. The compn . useful as a water-developable flexog. printing resin shows high elasticity, water developability, water (ink) resistance, processability, and storage stability.				
IC	ICM G03F007-033				
	ICS C09D005-00; G03F007-00; G03F007-004; G03F007-027				
CC	74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 38, 39				
ST	photosensitive polymer elastomer flexog printing plate; water developable flexog printing photosensitive polymer				
IT	Chlorinated polyethylene rubber RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses) (Elaslen 301MA; water-developable photosensitive resin compn. for flexog. printing plate)				

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IT Butadiene rubber, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(JSR-BR 02LL; water-developable **photosensitive resin compn.** for flexog. printing plate)

IT Butyl rubber, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(JSR-Butyl 365; water-developable **photosensitive resin compn.** for flexog. printing plate)

IT Nitrile rubber, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(JSR-NBR-N 234L; water-developable **photosensitive resin compn.** for flexog. printing plate)

IT Polyurethanes, preparation
RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic; water-developable **photosensitive resin compn.** for flexog. printing plate)

IT Styrene-butadiene rubber, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(block, triblock, Kraton 1101; water-developable **photosensitive resin compn.** for flexog. printing plate)

IT Butadiene rubber, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(carboxy-terminated, Hycar CTB 2000X162; water-developable **photosensitive resin compn.** for flexog. printing plate)

IT EPDM rubber
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(ethylene-ethylidenenorbornene-propene, JSR-EP 51; water-developable **photosensitive resin compn.** for flexog. printing plate)

IT Flexographic printing plates
(**photosensitive**; water-developable **photosensitive resin compn.** for flexog. printing plate)

IT Nitrile rubber, preparation
RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(piperazine group-terminated, Hycar ATBN 1300X16, **polymers** with HDI, dimethylolpropionic acid, polyoxytetramethylene glycol, and hydroxyethyl methacrylate, salts; water-developable **photosensitive resin compn.** for flexog. printing plate)

IT 25190-06-1DP, **polymers** with HDI, dimethylolpropionic acid, hydroxyethyl methacrylate, and amine-terminated nitrile rubber, salts
RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(PTMG 850; water-developable **photosensitive resin compn.** for flexog. printing plate)

IT 9003-17-2
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(butadiene rubber, JSR-BR 02LL; water-developable **photosensitive resin compn.** for flexog. printing plate)

IT 9003-17-2
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(butadiene rubber, carboxy-terminated, Hycar CTB 2000X162;

- water-developable **photosensitive resin compn.** for flexog. printing plate)
- IT 9010-85-9
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(butyl rubber, JSR-Butyl 365; water-developable **photosensitive resin compn.** for flexog. printing plate)
- IT 9002-88-4D, chlorinated
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(chlorinated polyethylene rubber, Elaslen 301MA; water-developable **photosensitive resin compn.** for flexog. printing plate)
- IT 57-11-4, Octadecanoic acid, uses 112-92-5, Stearyl alcohol 555-43-1, Glycerol tristearate
RL: DEV (Device component use); MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(compatibilizer; water-developable **photosensitive resin compn.** for flexog. printing plate)
- IT 9002-88-4D, Polyethylene, chlorinated 25038-36-2, Ethylene-ethylidenenorbornene-propylene copolymer
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(elastomeric; water-developable **photosensitive resin compn.** for flexog. printing plate)
- IT 9003-18-3
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(nitrile rubber, JSR-NBR-N 234L; water-developable **photosensitive resin compn.** for flexog. printing plate)
- IT 9003-18-3P
RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(nitrile rubber, piperazine group-terminated, Hycar ATBN 1300X16, **polymers** with HDI, dimethylolpropionic acid, polyoxytetramethylene glycol, and hydroxyethyl methacrylate, salts; water-developable **photosensitive resin compn.** for flexog. printing plate)
- IT 106107-54-4
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(styrene-butadiene rubber, block, triblock, Kraton 1101; water-developable **photosensitive resin compn.** for flexog. printing plate)
- IT 822-06-0DP, **polymers** with dimethylolpropionic acid, polyoxytetramethylene glycol, hydroxyethyl methacrylate, and amine-terminated nitrile rubber, salts 868-77-9DP, **polymers** with HDI, dimethylolpropionic acid, polyoxytetramethylene glycol, and amine-terminated nitrile rubber, salts 4767-03-7DP, **polymers** with HDI, polyoxytetramethylene glycol, hydroxyethyl methacrylate, and amine-terminated nitrile rubber, salts
RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water-developable **photosensitive resin compn.** for flexog. printing plate)
- IT 9003-17-2D, Polybutadiene, acrylate-contg. 65833-30-9, 1,9-Nonanediol dimethacrylate 159446-74-9, BAC 45 205537-69-5, ABU 205537-89-9, PB 4525
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(water-developable **photosensitive resin compn.** for flexog. printing plate)
- IT 57-11-4, Octadecanoic acid, uses 112-92-5, Stearyl

alcohol

RL: DEV (Device component use); MOA (Modifier or additive use); **TEM**
(**Technical or engineered material use**); USES (Uses)
(compatibilizer; water-developable **photosensitive**
resin compn. for flexog. printing plate)

RN 57-11-4 HCAPLUS

CN Octadecanoic acid (9CI) (CA INDEX NAME)

HO₂C- (CH₂)₁₆-Me

RN 112-92-5 HCAPLUS

CN 1-Octadecanol (8CI, 9CI) (CA INDEX NAME)

HO- (CH₂)₁₇-Me

L73 ANSWER 5 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1997:701437 HCAPLUS

DN 128:28620

TI **Photosensitive resin composition**

IN Kinashi, Keiichi; Chiba, Reiko

PA National Starch and Chemical Investment Holding Corp., USA

SO U.S., 6 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5681684	A	19971028	US 95-531026	19950920
AB	To provide a water-developable photosensitive resin compn. capable of forming a resist film that excels in hardness, heat resistance and water resistance. The photosensitive resin compn. of this invention is characterized by contg. an unsatd. epoxy ester compd. which is obtained by reacting the remaining epoxy side group of a partially carboxylic acid-esterified unsatd. epoxy ester compd. with an aliph. tertiary amine in the presence of an alc. solvent to convert it into a quaternary ammonium salt.				

IC ICM G03C001-725

NCL 430280100

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photoresist unsatd epoxy ester ammonium salt

IT Epoxy **resins**, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(unsatd., quaternary ammonium salts; water-developable photoresists contg.)

IT Photoresists

(water-developable; contg. unsatd. epoxy ester compd. quaternary ammonium salts)

IT 111-90-0, Diethylene glycol monoethyl ether

RL: NUU (Nonbiological use, unclassified); RCT (Reactant); **TEM**

(**Technical or engineered material use**); USES (Uses)

(reactions of unsatd. epoxy esters with carboxylic acids, quaternary ammonium compds. and aliph. tertiary amines in water-developable photoresist prepn. in presence of)

IT 71-91-0D, Tetraethylammonium bromide, reaction products with acrylic acid, dimethylethanolamine and unsatd. epoxy esters 79-10-7D, Acrylic acid, reaction products with dimethylethanolamine, tetraethylammonium bromide and unsatd. epoxy esters 79-41-4D, Methacrylic acid, reaction products

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with aliph. tertiary amines, quaternary ammonium compds. and unsatd. epoxy esters 105-59-9D, N-Methyldiethanolamine, reaction products with carboxylic acids, quaternary ammonium compds. and unsatd. epoxy esters 108-01-0D, N,N-Dimethylethanolamine, reaction products with carboxylic acids, quaternary ammonium compds. and unsatd. epoxy esters 109-02-4D, N-Methylmorpholine, reaction products with carboxylic acids, quaternary ammonium compds. and unsatd. epoxy esters 621-82-9D, Cinnamic acid, reaction products with aliph. tertiary amines, quaternary ammonium compds. and unsatd. epoxy esters 626-67-5D, N-Methylpiperidine, reaction products with carboxylic acids, quaternary ammonium compds. and unsatd. epoxy esters 3724-65-0D, Crotonic acid, reaction products with aliph. tertiary amines, quaternary ammonium compds. and unsatd. epoxy esters 3845-76-9D, 3-N,N-Dimethylaminopropylacrylamide, reaction products with carboxylic acids, quaternary ammonium compds. and unsatd. epoxy esters 25068-38-6D, Epon 201, reaction products with acrylic acid, tetraethylammonium bromide and aliph. tertiary amines 94362-50-2D, Epo Tohto YDCN 704, reaction products with acrylic acid, tetraethylammonium bromide and aliph. tertiary amines 109190-39-8D, Epo Tohto YDCN 702, reaction products with acrylic acid, aliph. tertiary amines and tetraethylammonium bromide

RL: TEM (Technical or engineered material use); USES (Uses)
(water-developable photoresists contg.)

IT 111-90-0, Diethylene glycol monoethyl ether

RL: NUU (Nonbiological use, unclassified); RCT (Reactant); TEM
(Technical or engineered material use); USES (Uses)

(reactions of unsatd. epoxy esters with carboxylic acids, quaternary ammonium compds. and aliph. tertiary amines in water-developable photoresist prep'n. in presence of)

RN 111-90-0 HCAPLUS

CN Ethanol, 2-(2-ethoxyethoxy)- (8CI, 9CI) (CA INDEX NAME)

EtO-CH₂-CH₂-O-CH₂-CH₂-OH

→ as Solvent

L73 ANSWER 6 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1997:547232 HCAPLUS

DN 127:154671

TI Positive-type light-sensitive lithographic printing plate

IN Maemoto, Kazuo; Kawabe, Yasumasa

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 780730	A2	19970625	EP 96-120207	19961216
	EP 780730	A3	19980715		
	R: DE, GB				
	JP 09179290	A2	19970711	JP 95-335145	19951222
PRAI	JP 95-335145		19951222		

OS MARPAT 127:154671

AB A pos.-type light-sensitive lithog. printing plate comprises a grained and anodized aluminum plate having formed on the surface thereof a layer of a light-sensitive compn. contg. (a) an o-naphthoquinonediazide compd., (b) an alk. water-sol. and water-insol. resin, (c) a compd. which generates an acid by light, (d) a blue dye the tone of which is changed with an acid, and (e) a yellow dye having a special structure and the absorbance of which at 417 nm is at least 70% of the absorbance at 436 nm. The light-sensitive lithog. printing plate has a high sensitivity and is characterized in that unnecessary images of the edge portions are

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difficult to form on the plate at the reprodn. of dots, the image visibility after exposure and the suitability of plate inspection after development are good, and register marks are easy to see.

IC ICM G03F007-022
ICS G03F007-09

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pos **photosensitive** lithog plate naphthoquinonediazide

IT Lithographic plates
(**photosensitive** compns. contg. naphthoquinonediazides, photoacid generators, and color-changing blue dyes for manuf. of)

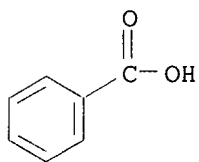
IT Photoimaging materials
(pos.; contg. naphthoquinonediazides, photoacid generators, and color-changing blue dyes for manuf. of lithog. plates)

IT 65-85-0, Benzoic acid, uses 85-43-8 25086-36-6 26678-93-3
27029-76-1 36451-09-9 68584-99-6 84938-98-7 94875-80-6
153273-61-1 193222-61-6 193222-62-7 193222-63-8 193222-64-9
193222-65-0 193222-66-1
RL: **TEM (Technical or engineered material use)**; USES (Uses)
(pos. photoimaging compns. for lithog. plate manuf. contg.)

IT 65-85-0, Benzoic acid, uses
RL: **TEM (Technical or engineered material use)**; USES (Uses)
(pos. photoimaging compns. for lithog. plate manuf. contg.)

RN 65-85-0 HCAPLUS

CN Benzoic acid (7CI, 8CI, 9CI) (CA INDEX NAME)



L73 ANSWER 7 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1997:476117 HCAPLUS

DN 127:96036

TI Novolac **resins** with stable molecular weight and photoresists made from them

IN Rahman, M. Dalil; Hannigan, Timothy T.; Lynch, Thomas J.

PA Hoechst Celanese Corporation, USA

SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

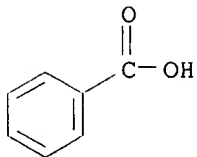
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09143237	A2	19970603	JP 96-251921	19960924
PRAI	US 95-4536		19950929		

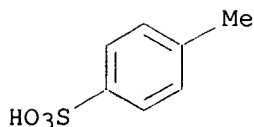
AB Novolak **resins**, which have very low metal ion content and desirable mol. wt. and are water-insol. and sol. in aq. alkali, are prep'd. in a process comprising steps: (1) **polymg.** formaldehyde and phenol-type compds. in the presence of an acid catalyst to give a film-forming **resin**, (2) washing cation-exchange **resin** with deionized water and mineral acid soln. to reduce the contents of sodium ion and iron ion in the cation-exchange **resin** to <100 ppm, (3) washing an anion-exchange **resin** with deionized water, a hydroxide soln. of a non-metal element, and deionized water to remove hydroxides, (4) passing the novolac **resin** through the cation- and the anion-exchange **resin**, and (5) distg. the novolac **resin** first at a temp. which is not higher than the b.p. of the

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- phenolic compds. under normal pressure and then at 150-240.degree. in 5-50 mmHg vacuum. A photoresist **compn.** is obtained by mixing the novolac **resin** with **photosensitive** substances and solvents. Semiconductor devices are made by using the photoresist **compn.**
- IC ICM C08G008-08
ICS C08G008-08; G03F007-023; G03F007-039; H01L021-027
- CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 74
- ST novolac photoresist semiconductor device; phenol formaldehyde novolac photoresist; cresol xylenol formaldehyde novolac photoresist
- IT Photoresists
(photoresist compns. contg. novolac **resins** with stable mol. wt.)
- IT Novolaks
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of novolac **resins** with stable mol. wt. and photoresists)
- IT Semiconductor devices
(semiconductor devices coated with photoresist compns. contg. novolac **resins** with stable mol. wt.)
- IT 65-85-0, Benzoic acid, uses 104-15-4, p-Toluenesulfonic acid, uses 108-31-6, Maleic anhydride, uses 110-16-7, Maleic acid, uses 144-62-7, Oxalic acid, uses 7697-37-2, Nitric acid, uses
RL: CAT (Catalyst use); USES (Uses)
(prepn. of novolac **resins** with stable mol. wt. and photoresists)
- IT 25053-98-9P, m-Cresol-formaldehyde-3,5-xylenol copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of novolac **resins** with stable mol. wt. and photoresists)
- IT 97-64-3, Ethyl lactate 763-69-9, Ethyl 3-ethoxypropionate 84540-57-8, Propylene glycol methyl ether acetate
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(solvent; photoresist compns. contg. novolac **resins** with stable mol. wt.)
- IT 7440-21-3, Silicon, uses
RL: DEV (Device component use); USES (Uses)
(wafer; semiconductor devices coated with photoresist compns. contg. novolac **resins** with stable mol. wt.)
- IT 65-85-0, Benzoic acid, uses 104-15-4, p-Toluenesulfonic acid, uses
RL: CAT (Catalyst use); USES (Uses)
(prepn. of novolac **resins** with stable mol. wt. and photoresists)
- RN 65-85-0 HCAPLUS
- CN Benzoic acid (7CI, 8CI, 9CI) (CA INDEX NAME)



- RN 104-15-4 HCAPLUS
- CN Benzenesulfonic acid, 4-methyl- (9CI) (CA INDEX NAME)



L73 ANSWER 8 OF 34 HCAPLUS COPYRIGHT 1999 ACS
 AN 1997:60898 HCAPLUS
 DN 126:82228
 TI Method for manufacturing superior ink-water balance and alkaline-resistant presensitized lithographic plate
 IN Hwang, Ho Chien
 PA Western Litho Plate & Supply Co., USA
 SO Can. Pat. Appl., 39 pp.
 CODEN: CPXXEB
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2147388	AA	19960909	CA 95-2147388	19950418
PRAI	US 95-400604		19950308		
AB	An alk.-resistant and excellent ink-water balance presensitized lithog. plate comprises a layer of a photosensitive compn. on an aluminum substrate. The photosensitive compn. contains (a) a photosensitive diazo resin comprising a condensation product of an arom. diazonium salt, a copolymerizable compd. free of diazonium groups, and an active carbonyl-contg. compd. and (b) a binder comprising a high-mol.-wt. acrylic resin . The aluminum substrate is treated by graining, etching with a caustic soln. contg. 1.0-4.75 wt.% of an alkali metal hydroxide, and hydrophilizing.				
IC	ICM G03F007-021				
	ICS G03F007-09; G03F007-16				
CC	74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
ST	presensitized lithog plate photosensitive diazo resin				
IT	Photoimaging materials (contg. diazo resins for lithog. plate prepn.)				
IT	Lithographic plates (presensitized; photosensitive diazo resin compns. for)				
IT	2390-60-5, Victoria blue BOH 77833-95-5, Acrylonitrile-ethylacrylate-4-hydroxyphenyl methacrylamide-methacrylic acid copolymer 134621-72-0 185463-53-0, Acrylonitrile-ethylacrylate-3-hydroxyphenyl methacrylamide-methacrylic acid copolymer				
	RL: TEM (Technical or engineered material use); USES (Uses) (presensitized lithog. plates using photosensitive compns. contg.)				
IT	9003-01-4, Poly(acrylic acid) RL: TEM (Technical or engineered material use); USES (Uses) (presensitized lithog. plates using photosensitive compns. contg. diazo resins and)				
IT	109-86-4, Methyl Cellosolve 111-42-2, Diethanolamine, uses 122-99-6, Phenylcellosolve 25417-20-3, Sodium dibutylnaphthalene sulfonate				
	RL: TEM (Technical or engineered material use); USES (Uses) (presensitized lithog. plates using photosensitive diazo resins and developed by solns. contg.)				
IT	7429-90-5, Aluminum, uses RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)				

(substrates for presensitized lithog. plates contg. **photosensitive diazo resins**)
 IT 122-99-6, Phenylcellosolve
 RL: **TEM (Technical or engineered material use)**; USES (Uses)
 (presensitized lithog. plates using **photosensitive diazo resins** and developed by solns. contg.)
 RN 122-99-6 HCAPLUS
 CN Ethanol, 2-phenoxy- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

PhO-CH₂-CH₂-OH

L73 ANSWER 9 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1996:73500 HCAPLUS

DN 124:131556

TI **Photosensitive resin composition** useful as
 resist for preparing printed circuit boards

IN Nishikawa, Yoshasu; Niki, Norio; Hagio, Shigeru; Koda, Kazuhiko; Uehara, Shinichi

PA Ibiden Co Ltd, Japan; San Nopco Kk

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

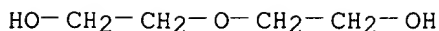
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07281433	A2	19951027	JP 94-95834	19940407
AB	The title resin compn. comprises (1) a film-forming binder polymer sol. or swellable in alkali aq. solns., (2) a thermosetting polyisocyanate compd. having .gtoreq.1 photopolymerizable ethylenic unsatd. group, of which the isocyanate groups are protected by alcs., phenols, amines, oximes, hydroxamates, caprolactams, thiols, or active methylene-contg. compds., (3) a compd. having .gtoreq.1 CO ₂ H group and .gtoreq.1 photopolymerizable ethylenic unsatd. group, (4) an ethylenic unsatd. compd. which is able to form a polymer by photopolymn. initiators and is a liq. or solid at ordinary temp., and (5) a photopolymn. initiator which generates a radical by irradiation with active energy rays. The compn. is alkali-developable and shows high photosensitivity , high resolu., and good resistance to electroless plating solns. Thus, a photosensitive resin compn. comprised Me methacrylate-Bu acrylate-acrylic acid copolymer, a compd. prepd. by addn. of diethylene glycol with isophorone diisocyanate and then with 2-hydroxyethyl acrylate, a compd. prepd. by addn. of phenol novolak-type epoxy resin with acrylic acid and then with phthalic anhydride, trimethylolpropane triacrylate, tetraethylene glycol diacrylate, and benzophenone was prepd.				
IC	ICM G03F007-027				
	ICS G03F007-027; G03F007-004; G03F007-028; G03F007-033; H05K003-00; H05K003-18; H05K003-28				
CC	74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
ST	photosensitive resin compn binder polymer ; photopolymerizable polyisocyanate photosensitive resin compn ; photopolymn initiator photosensitive resin compn				
IT	Photoimaging compositions and processes (photosensitive resin compns. contg. alkali-sol. binder polymers and polyisocyanate compds. and ethylenic unsatd. compds. for printed circuit boards manuf. for sensitivity and resolu. and resistance to electroless plating)				
IT	Phenolic resins , preparation				

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- RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (epoxy, novolak, reaction products with acrylic acid and phthalic anhydride; **photosensitive resin** compns. contg.
 alkali-sol. binder **polymers** and polyisocyanate compds. and ethylenic unsatd. compds. for printed circuit boards manuf.)
- IT Epoxy **resins**, preparation
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (phenolic, novolak, reaction products with acrylic acid and phthalic anhydride; **photosensitive resin** compns. contg.
 alkali-sol. binder **polymers** and polyisocyanate compds. and ethylenic unsatd. compds. for printed circuit boards manuf.)
- IT Resists
 (photo-, **photosensitive resin** compns. contg.
 alkali-sol. binder **polymers** and polyisocyanate compds. and ethylenic unsatd. compds. for printed circuit boards manuf. for sensitivity and resoln. and resistance to electroless plating)
- IT Electric circuits
 (printed, boards, printed; **photosensitive resin** compns. contg. alkali-sol. binder **polymers** and polyisocyanate compds. and ethylenic unsatd. compds. for printed circuit boards manuf. for sensitivity and resoln. and resistance to electroless plating)
- IT 119-61-9, Benzophenone, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (photopolymn. initiator; **photosensitive resin** compns. contg. alkali-sol. binder **polymers** and polyisocyanate compds. and ethylenic unsatd. compds. for printed circuit boards manuf.)
- IT 78-59-1DP, Isophorone, reaction products with diethylene glycol and hydroxyethyl acrylate 79-10-7DP, Acrylic acid, reaction products with phenolic epoxy **resins** and phthalic anhydride 85-44-9DP, Phthalic anhydride, reaction products with phenolic epoxy **resins** and acrylic acid 111-46-6DP, Diethylene glycol, reaction products with isophorone diisocyanate and hydroxyethyl acrylate 818-61-1DP, 2-Hydroxyethyl acrylate, reaction products with diethylene glycol and isophorone
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (**photosensitive resin** compns. contg. alkali-sol. binder **polymers** and polyisocyanate compds. and ethylenic unsatd. compds. for printed circuit boards manuf. for sensitivity and resoln. and resistance to electroless plating)
- IT 15625-89-5, Trimethylolpropane triacrylate 17831-71-9, Tetraethylene glycol diacrylate 26300-51-6, Acrylic acid-butyl acrylate-methyl methacrylate copolymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**photosensitive resin** compns. contg. alkali-sol. binder **polymers** and polyisocyanate compds. and ethylenic unsatd. compds. for printed circuit boards manuf. for sensitivity and resoln. and resistance to electroless plating)
- IT 111-46-6DP, Diethylene glycol, reaction products with isophorone diisocyanate and hydroxyethyl acrylate
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (**photosensitive resin** compns. contg. alkali-sol. binder **polymers** and polyisocyanate compds. and ethylenic unsatd. compds. for printed circuit boards manuf. for sensitivity and resoln. and resistance to electroless plating)
- RN 111-46-6 HCAPLUS
- CN Ethanol, 2,2'-oxybis- (9CI) (CA INDEX NAME)



L73 ANSWER 10 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:967696 HCAPLUS

DN 123:354679

TI Positive-working photoresist **composition**

IN Sugama, Eriko; Tamura, Akira

PA Toppan Printing Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

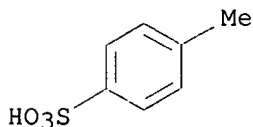
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07248619	A2	19950926	JP 94-42271	19940314
AB	The compn. comprises an alkali-sol. resin , 1,2-naphthoquinonediazide compd. photosensitive agent, and an acidic compd. The compn. shows high sensitivity and good storage stability.				
IC	ICM G03F007-022				
	ICS G03F007-004; H01L021-027				
CC	74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
ST	photoresist naphthoquinonediazide acidic compd				
IT	Phenolic resins , uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (novolak, photoresist compn. contg. naphthoquinonediazide compd. and acidic compd.)				
IT	Resists				
	(photo-, photoresist compn. contg. naphthoquinonediazide compd. and acidic compd.)				
IT	64-19-7, Acetic acid, uses 104-15-4, p-Toluenesulfonic acid, uses 144-62-7, Oxalic acid, uses 7647-01-0, Hydrochloric acid, uses 7664-38-2, Phosphoric acid, uses 7664-93-9, Sulfuric acid, uses 7697-37-2, Nitric acid, uses				
	RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (photoresist compn. contg. naphthoquinonediazide compd. and acidic compd.)				
IT	107761-81-9, 2,3,4,4'-Tetrahydroxybenzophenone 1,2-naphthoquinonediazide-5-sulfonic acid ester				
	RL: TEM (Technical or engineered material use); USES (Uses) (photoresist compn. contg. naphthoquinonediazide compd. and acidic compd.)				
IT	104-15-4, p-Toluenesulfonic acid, uses				
	RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (photoresist compn. contg. naphthoquinonediazide compd. and acidic compd.)				
RN	104-15-4 HCAPLUS				
CN	Benzenesulfonic acid, 4-methyl- (9CI) (CA INDEX NAME)				



L73 ANSWER 11 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:785453 HCAPLUS

DN 123:242100

TI **Photosensitive compositions** containing compounds forming oxygen-shielding layer and **photosensitive** lithographic plates

IN Nishioka, Akira

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07168347	A2	19950704	JP 93-313589	19931214
	US 5567568	A	19961022	US 94-357305	19941214
PRAI	JP 93-313589		19931214		
OS	MARPAT 123:242100				

AB In the **photosensitive** compns. contg. (A) ethylenic polymerizable compds., (B) film-forming **polymers** sol. or swellable in aq, alk. solns., (C) photopolymn. initiators, (D) neg.-working diazo **resins**, (E) compds. which dissolve in the **photosensitive** liqs. and are capable of floating on the surface of the **photosensitive** layer upon coating and drying of the compns. to form an O-shielding layer, R1 CONR2R3 (R1 = C15-25 alkyl; R2 = H, Me, Et, Pr; R3 = Me, Et, Pr) and R4CO2H (R4 = C15-25 alkyl), R4CH2OH, or R4CONH2 are contained as compds. of (E). The lithog. plates are manufd. by coating a support with the **photosensitive** compns. and drying, and have a mat layer showing a micropattern composed of a coating area, which is obtained from a **compn.** contg. a copolymer having gtoreq.1 sulfo-contg. monomer unit, and non-coated area. The photopolymn. initiators may be phenyl-S-triazines. The compns. are prevented from inhibition of **polymn.** by O during exposure and the lithog. plates show high printing durability.

IC ICM G03F007-004

ICS G03F007-00; G03F007-027; G03F007-029; G03F007-033; G03F007-11

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photosensitive compn** oxygen shielding additive; lithog plate presensitized resist **compn**; printing plate lithog resist **compn**

IT Lithographic plates

(resist compns. contg. compds. for in situ formation of O-shielding layer and lithog. plate with mat layer from the compns.)

IT Resists

(photo-, resist compns. contg. compds. for in situ formation of O-shielding layer and lithog. plate with mat layer from the compns.)

IT 57-11-4, Stearic acid, uses 112-85-6, Behenic acid
112-92-5, Stearyl alcohol 124-26-5, Stearamide 661-19-8,
Docosanol 3061-75-4, Behenamide 3886-90-6, N,N-Dimethylstearamide
16715-91-6, N-Methylbehenamide 20198-92-9, N-Methylstearamide

RL: DEV (Device component use); MOA (Modifier or additive use); **TEM** (Technical or engineered material use); USES (Uses)

(O-shielding layer from; resist compns. contg. compds. for in situ formation of O-shielding layer and lithog. plate with mat layer from the compns.)

IT 88403-57-0

RL: DEV (Device component use); USES (Uses)

(mat layer from; resist compns. contg. compds. for in situ formation of O-shielding layer and lithog. plate with mat layer from the compns.)

IT 115168-59-7 115168-69-9 155600-23-0

RL: TEM (Technical or engineered material use); USES (Uses)

KATHLEEN FULLER STIC LIBRARY 308-4290

(photopolymn. initiator; resist compns. contg. compds. for in situ formation of O-shielding layer and lithog. plate with mat layer from the compns.)

IT 4986-89-4, Pentaerythritol tetraacrylate 60506-81-2, Dipentaerythritol pentaacrylate 68541-74-2, p-Diazodiphenylamine-formaldehyde copolymer hexafluorophosphate 90216-38-9, Allyl methacrylate-methacrylic acid copolymer

RL: TEM (Technical or engineered material use); USES (Uses)
(resist compns. contg. compds. for in situ formation of O-shielding layer and lithog. plate with mat layer from the compns.)

IT 57-11-4, Stearic acid, uses 112-92-5, Stearyl alcohol

RL: DEV (Device component use); MOA (Modifier or additive use); **TEM** (Technical or engineered material use); USES (Uses)
(O-shielding layer from; resist compns. contg. compds. for in situ formation of O-shielding layer and lithog. plate with mat layer from the compns.)

RN 57-11-4 HCAPLUS

CN Octadecanoic acid (9CI) (CA INDEX NAME)

HO₂C-(CH₂)₁₆-Me

RN 112-92-5 HCAPLUS

CN 1-Octadecanol (8CI, 9CI) (CA INDEX NAME)

HO-(CH₂)₁₇-Me

L73 ANSWER 12 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:557119 HCAPLUS

DN 122:303013

TI **Photosensitive composition**

IN Tomikawa, Masao; Eguchi, Masuichi; Asano, Masaya

PA Toray Industries, Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

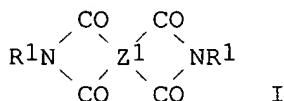
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06258836	A2	19940916	JP 93-43705	19930304
GI					



AB A **photosensitive compn.** for producing pos. images comprises a compd. represented by the formula I (.gtoreq.1 of R1 is naphthoquinonediazidosulfonyl and the other is an org. group; Z1 is a tetravalent org. group contg. .gtoreq.2 C atoms) and/or a compd. represented by the formula [C[Z2(CONHR2)m]O2R3]n (Z2 is an org. group whose valence depends on the values of m and n; R2 is naphthoquinonediazidosulfonyl; R3 is H or an alkali metal; m is an integer of 1-4; n is an integer of 0-3; m + n is 4), and a **polymer** having the structural unit of -[COZ3(CO2R4)pCONHZ4NH]- (Z3 is an org.

KATHLEEN FULLER STIC LIBRARY 308-4290

group whose valence depends on the value of p; R4 is H or an alkali metal; Z4 is a divalent org. group contg. .gtoreq.2 C atoms; p is 1 or 2).

ICM G03F007-039
ICS C08G073-10; C08L079-08; G03F007-004; G03F007-022; H01L021-027; H01L021-312

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photosensitive compn** pos polyimide
naphthoquinonediazidosulfonate

IT Photoimaging **compositions** and processes
(contg. polyimides and naphthoquinonediazidosulfonyl compds. for pos. image formation)

IT Polyamic acids
Polyimides, preparation
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoimaging compns. contg. naphthoquinonediazidosulfonyl compds. and)

IT Resists
(photo-, pos.-working, contg. polyimides and naphthoquinonediazidosulfonyl compds.)

IT 9043-05-4P 24991-11-5P, 3,3',4,4'-Benzophenonetetracarboxylic acid-4,4'-Diaminodiphenyl ether copolymer, sru 25036-53-7P, 4,4'-Diaminodiphenyl ether-pyromellitic anhydride copolymer, SRU 25038-81-7P, 4,4'-Diaminodiphenyl ether-pyromellitic anhydride copolymer 26875-71-8P 39940-16-4P 64427-99-2P 64428-14-4P 69639-26-5P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoimaging compns. contg. naphthoquinonediazidosulfonyl compds. and)

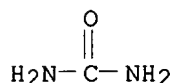
IT 163110-00-7P 163110-01-8P 163110-02-9P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(pos. photoimaging compns. contg. polyimides and)

IT 3770-97-6
RL: RCT (Reactant); TEM (Technical or engineered material use); USES (Uses)
(reaction in prepg. diimides for pos. photoimaging compns.)

IT 57-13-6, Urea, reactions 89-32-7 121-44-8, reactions 2421-28-5
RL: RCT (Reactant); **TEM (Technical or engineered material use);** USES (Uses)
(reaction in prepg. naphthoquinonediazidosulfonyl-contg.diimides for pos. photoimaging compns.)

IT 57-13-6, Urea, reactions
RL: RCT (Reactant); **TEM (Technical or engineered material use);** USES (Uses)
(reaction in prepg. naphthoquinonediazidosulfonyl-contg.diimides for pos. photoimaging compns.)

RN 57-13-6 HCAPLUS
CN Urea (8CI, 9CI) (CA INDEX NAME)



L73 ANSWER 13 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:392253 HCAPLUS

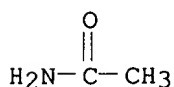
DN 122:226837

TI **Photosensitive polyimide precursor compositions**

KATHLEEN FULLER STIC LIBRARY 308-4290

IN Eguchi, Masuichi; Asano, Masaya
 PA Toray Industries, Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06301209	A2	19941028	JP 93-90129	19930416
AB	The title compns. contain (a) a polymer having a main structural unit of COR1(CO2R3)nCONHR2NH (R1 = C.gtoreq.2 tri- or tetravalent org. group; R2 = C.gtoreq.2 divalent org. group; R3 = H, alkali metal ion, NH4+, Cl-30 org. group; n = 1, 2), (b) .gtoreq.1 compd. selected from (N-substituted) amide, urethane, and urea compds. having no ethylenically unsatd. double bond., (c) a photo-reactive monomer, and (d) a photoinitiator and/or sensitizer. The compns. are easily manufd. and provide high-quality pos. polyimide patterns. Thus, a photosensitive compn. comprised a polyamic acid prepd. from 3,3',4,4'-benzophenonetetracarboxylic acid dianhydride, pyromellitic di-anhydride, 4,4'-diaminodiphenyl ether, and bis(3-aminopropyl)tetramethyldisiloxane, acetamide, 2-hydroxyethyl methacrylate, and 3-phenyl-5-isoxazolone, and 3,3'-carbonylbis(diethylaminocoumarin):				
IC	ICM G03F007-039 ICS C08F002-44; C08F002-48; C08K005-16; C08L079-08; G03F007-027; H01L021-027				
CC	74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
ST	pos working photoresist polyamic acid; amide urethane urea polyimide photoresist				
IT	Polyamic acids RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (pos.-working photoresists contg. polyimide precursors, double bond-free amides (analog), and monomers)				
IT	Resists (photo-, pos.-working, pos.-working photoresists contg. polyimide precursors, double bond-free amides (analog), and monomers)				
IT	106573-86-8P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (pos.-working photoresists contg. polyimide precursors, double bond-free amides (analog), and monomers)				
IT	60-35-5, Acetamide, uses 79-05-0, Propionamide 79-06-1, Acrylamide, uses 79-41-4, Methacrylic acid, uses 105-16-8, Diethylaminoethyl methacrylate 616-45-5, 2-Pyrrolidone 623-76-7, 1,3-Diethylurea 868-77-9, 2-Hydroxyethyl methacrylate 17576-39-5 86291-20-5 161982-93-0 RL: TEM (Technical or engineered material use) ; USES (Uses) (pos.-working photoresists contg. polyimide precursors, double bond-free amides (analog), and monomers)				
IT	60-35-5, Acetamide, uses RL: TEM (Technical or engineered material use) ; USES (Uses) (pos.-working photoresists contg. polyimide precursors, double bond-free amides (analog), and monomers)				
RN	60-35-5 HCAPLUS				
CN	Acetamide (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)				



L73 ANSWER 14 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:374995 HCAPLUS

DN 122:147363

TI Developer for **photosensitive resin composition** and developing method

IN Suzuki, Juji; Karasawa, Yasushi; Atobe, Mitsuaki

PA Seiko Epson Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 15 pp.

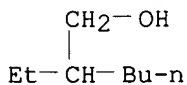
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06308738	A2	19941104	JP 93-92890	19930420
AB	The developer comprises Bu acetate and C1-9 alc., and alc.conc. is 33.3-75 wt.%. The photosensitive resin film is patternwise exposed and developed with the developer. The developer dose not contain trichloroethane and prevents environmental pollution, and is useful for making ink-jet nozzles.				
IC	ICM G03F007-32				
	ICS G03F007-30				
CC	74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
ST	photosensitive resin developer butyl acetate; photoresist developer alc				
IT	Resists (photo-, photosensitive resin developer contg. Bu acetate and alc.)				
IT	64-17-5, Ethanol, uses 67-56-1, Methanol, uses 67-63-0, 2-Propanol, uses 71-23-8, 1-Propanol, uses 71-36-3, 1-Butanol, uses 71-41-0, 1-Pentanol, uses 78-83-1, 2-Methyl-1-propanol, uses 78-92-2, 2-Butanol 104-76-7, 2-Ethyl-1-hexanol 111-27-3, 1-Hexanol, uses 111-70-6, 1-Heptanol 111-87-5, 1-Octanol, uses 123-86-4, Butyl acetate 123-96-6, 2-Octanol 137-32-6, 2-Methyl-1-butanol 143-08-8, 1-Nonanol				
	RL: TEM (Technical or engineered material use) ; USES (Uses) (photosensitive resin developer contg. Bu acetate and alc.)				
IT	104-76-7, 2-Ethyl-1-hexanol 111-27-3, 1-Hexanol, uses				
	RL: TEM (Technical or engineered material use) ; USES (Uses) (photosensitive resin developer contg. Bu acetate and alc.)				
RN	104-76-7 HCAPLUS				
CN	1-Hexanol, 2-ethyl- (8CI, 9CI) (CA INDEX NAME)				



RN 111-27-3 HCAPLUS

CN 1-Hexanol (9CI) (CA INDEX NAME)

HO--(CH₂)₅--Me

L73 ANSWER 15 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1994:446612 HCAPLUS

DN 121:46612

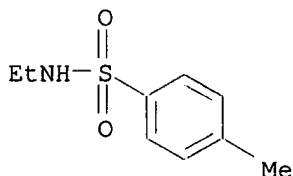
TI **Negative-working photosensitive** heat-resistant

KATHLEEN FULLER STIC LIBRARY 308-4290

polymer composition

IN Kataoka, Fumio; Yoshikawa, Haruhiko; Shoji, Fusaji; Nishikame, Masashi;
 Obara, Isao
 PA Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.
 SO Jpn. Kokai Tokkyo Koho, 15 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04366169	A2	19921218	JP 81-143010	19910614
AB	The title polymer compn. comprises (1) a polymer -[CO-R1(CO2H)2-CONH-R2-NH]- (R1 = C.gtoreq.4 tetravalent org. group; R2 = arom. ring, Si-contg. bivalent org. group) (0.5-50 wt. parts), (2) an arom. bisazide photo-crosslinking agent (0.1-100 wt. parts), (3) an unsatd. amine (1 - 400 wt. parts), (4) a sulfonamide (0.5 - 50 wt. parts) selected from R3SO2NHR4, R3SO2NR42, R3SO2NHR5NHSO2R4 (R3 = arom. group, alkyl; R4 = H, arom. group, alkyl; R5 = alkylene, bivalent org. group contg. arom. rings). This compn. shows high sensitivity, and is developable at a higher developing speed.				
IC	ICM C08L077-06 ICS C08K005-17; C08K005-28; C08K005-43				
CC	74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
ST	neg working polymer compn photoresist; polyamic acid polyimide photoresist compn				
IT	Polyamic acids Polyimides, uses RL: USES (Uses) (neg. -working photoresist compn. from)				
IT	Resists (photo-, neg. -working, polyimide type, with high sensitivity and developing speed)				
IT	68-34-8, p-Toluenesulfonylanilide 70-55-3, p-Toluenesulfonamide 80-39-7, p-Toluenesulfonyl-N-ethylamide 98-10-2, Benzenesulfonamide 649-15-0 4367-02-6 58821-26-4 74043-79-1 115166-68-2 117964-11-1 RL: USES (Uses) (neg. -working photoresist compn. from)				
IT	26298-81-7P, 4,4'-Diaminodiphenyl ether-3,3',4,4'-biphenyltetracarboxylic dianhydride copolymer 26615-45-2P 56091-26-0P RL: SPN (Synthetic preparation); PREP (Preparation) (prep. and use of, neg. -working photoresist compn. from)				
IT	80-39-7, p-Toluenesulfonyl-N-ethylamide RL: USES (Uses) (neg. -working photoresist compn. from)				
RN	80-39-7 HCAPLUS				
CN	Benzenesulfonamide, N-ethyl-4-methyl- (9CI) (CA INDEX NAME)				



AN 1994:19271 HCAPLUS
 DN 120:19271
 TI **Photosensitive, heat-resistant polymer compositions**
 IN Yoshikawa, Haruhiko; Kataoka, Fumio; Shoji, Fusaji; Nishikame, Masashi; Obara, Isao
 PA Hitachi Ltd, Japan; Hitachi Chemical Co Ltd
 SO Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05080514	A2	19930402	JP 91-241077	19910920

AB The title comps. comprise (1) **polymer** having a repeating unit COZ1(COOH)2CONHZ2NH (Z1 = C.g.toreq.4 org. group having 4 valences; Z2 = divalent org. group having an arom. ring or Si) 100, (2) amine compd. having an unsatd. bond 1-400, and (3) sulfonamide compd. selected from R1SO2NHR2, R1SO2N(R2)2, and R1SO2NHZ3NHSO2R2 (R1 = arom. group, alkyl; R2 = H, arom. group, alkyl; Z3 = alkylene, divalent org. group having an arom. ring) 0.5-50 wt. parts. The comps. show high developing rate, good mech. strength, and improved workability in forming insulating and protective coatings for semiconductor elements and electronics.

IC ICM G03F007-038
 ICS G03F007-004; G03F007-075; H01L021-027; H01L021-312; H05K003-28

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 76

ST photoresist heat resistant; polyamide sulfonamide unsatd amine photoresist

IT Polyamides, uses
 RL: USES (Uses)
 (neg.-working photoresists from)

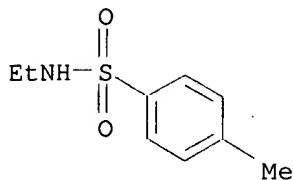
IT Resists
 (photo-, neg.-working, contg. polyamides, unsatd. amines, and sulfonamides)

IT 68-34-8, p-Toluenesulfonylanilide 70-55-3, p-Toluenesulfonamide 80-39-7, p-Toluenesulfonyl-N-ethylamide 98-10-2, Benzenesulfonamide 599-86-0 649-15-0 1129-26-6, p-Methoxybenzenesulfonamide 1899-94-1, m-Toluenesulfonamide 1907-65-9 69728-92-3 74043-79-1 115166-68-2 117964-11-1 151619-27-1
 RL: USES (Uses)
 (neg.-working photoresist contg., for rapid developability)

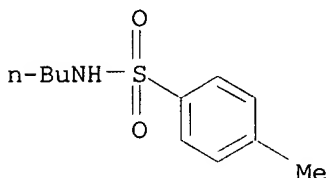
IT 105-16-8, 2-(N,N-Diethylamino)ethyl methacrylate 2867-47-2, 2-(N,N-Dimethylamino)ethyl methacrylate 20602-77-1, 3-(N,N-Dimethylamino)propyl methacrylate 25085-92-1 26298-81-7, 3,3',4,4'-Biphenyltetracarboxylic acid dianhydride-4,4'-diaminodiphenyl ether copolymer 26615-45-2, 3,3',4,4'-Biphenyltetracarboxylic acid dianhydride-4,4'-diaminodiphenyl ether copolymer, sru 60283-41-2 84329-58-8 84329-59-9 117247-38-8
 RL: USES (Uses)
 (neg.-working photoresist from)

IT 80-39-7, p-Toluenesulfonyl-N-ethylamide 1907-65-9
 RL: USES (Uses)
 (neg.-working photoresist contg., for rapid developability)

RN 80-39-7 HCAPLUS
 CN Benzenesulfonamide, N-ethyl-4-methyl- (9CI) (CA INDEX NAME)



RN 1907-65-9 HCAPLUS
 CN Benzenesulfonamide, N-butyl-4-methyl- (9CI) (CA INDEX NAME)



L73 ANSWER 17 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1991:460877 HCAPLUS

DN 115:60877

TI **Photosensitive composition** for lithographic
 platemaking and integrated circuit fabrication

IN Nagashima, Akira

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 22 pp.

CODEN: JKXXAF

DT Patent

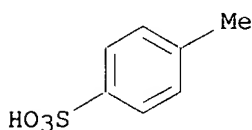
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02213847	A2	19900824	JP 89-35872	19890215
	JP 2577629	B2	19970205		
AB	The title photosensitive compn. contains a pos.-working photosensitive compd., water-insol. but alkali-sol. polymer processing SO ₂ NH ₂ bonds in the main or side chain(s), and an org. acid with pKa .ltoreq. 3.				
IC	ICM G03F007-039				
CC	74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
ST	photoresist pos working; lithog platemaking pos working photoresist; integrated circuit pos working photoresist; photomask pos working photoresist				
IT	Lithographic plates (of pos. working photoresist)				
IT	Electric circuits (integrated, of pos.-working photoresists for)				
IT	Resists (photo-, pos. working, wear- and chem.-resistant)				
IT	75-75-2, Methanesulfonic acid 88-89-1, Picric acid 98-67-9, p-Hydroxybenzenesulfonic acid 101-02-0 104-15-4 , p-Toluene sulfonic acid, uses and miscellaneous 120-18-3, Naphthalene-2-sulfonic acid 838-85-7, Diphenyl phosphate 3453-83-6				
	RL: TEM (Technical or engineered material use) ; USES (Uses) (photoresist compn. contg., lithog. platemaking using)				
IT	62814-37-3 117787-84-5 124996-93-6 124996-94-7 125026-42-8				
	RL: TEM (Technical or engineered material use); USES (Uses)				

KATHLEEN FULLER STIC LIBRARY 308-4290

(photoresist **compn.** contg., pos.-working)
 IT 68510-93-0
 RL: USES (Uses)
 (photoresist **compn.** using, pos.-working)
 IT 104-15-4, p-Toluene sulfonic acid, uses and miscellaneous
 RL: **TEM (Technical or engineered material use)**; USES (Uses)
 (photoresist **compn.** contg., lithog. platemaking using)
 RN 104-15-4 HCAPLUS
 CN Benzenesulfonic acid, 4-methyl- (9CI) (CA INDEX NAME)



L73 ANSWER 18 OF 34 HCAPLUS COPYRIGHT 1999 ACS
 AN 1989:125487 HCAPLUS
 DN 110:125487
 TI **Photosensitive compositions**, and lithographic plates
 containing the same
 IN Nakai, Hideyuki; Matsubara, Shinichi; Urano, Toshiyoshi; Murakami, Sachiko
 PA Konica Co., Japan; Mitsubishi Kasei Corp.
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63149637	A2	19880622	JP 86-297304	19861212

AB Compds. that liberate acid by irradiation with activating radiation, compds. that have a COC bond or bonds cleavable by the acid, and radical scavengers are contained in the title compns. The title lithog. plates have a **photosensitive** layer or layers contg. these compns. These compns. maintain a stable sensitivity after the exposure, and high reproducibility of halftone dots. Thus, an acid-cleavable polymeric compd. with units of the formula $-(CH_2CH_2O)_3(1,1\text{-cyclohexylene})O-$ 2.14, cresol novolak 5.74, 2-trichloromethyl-5-[β -(2-benzofuryl)vinyl]-1,3,4-oxadiazole (acid-liberating compd.) 0.27, Victoria Pure Blue BOH 0.05, and hydroquinone (radical scavenger) 0.04 g dissolved in Me cellosolve were applied on anodized Al plates to obtain **photosensitive** lithog. plates. These plates showed no change in sensitivity upon a 90-min postexposure standing, either before or after 2-day preexposure storage of the plates at 40.degree. and 80% relative humidity.

IC ICM G03C001-72
 ICS G03C001-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST lithog plate **photosensitive** radical scavenger

IT Lithographic plates
 (photosensitive compns. contg. acid-generators and acid-cleavable compds. and radical scavengers for, for stable **photosensitivity**)

IT Phenolic resins, uses and miscellaneous
 RL: USES (Uses)
 (novolak, **photosensitive** lithog. plates with stable sensitivity contg.)

IT 112-35-6, Triethylene glycol monomethyl ether 122-99-6, Phenyl cellosolve

RL: USES (Uses)
 (condensation of, with acetal, acid-cleavable compd. for
photosensitive lithog. plates from)

IT 931-94-2, 1,1-Dimethoxycyclopentane 933-40-4, 1,1-Dimethoxycyclohexane
 RL: USES (Uses)
 (condensation of, with glycol ether, acid-cleavable compd. for
photosensitive lithog. plates from)

IT 27029-76-1
 RL: USES (Uses)
 (novolak, **photosensitive** lithog. plates with stable
 sensitivity contg.)

IT 102-77-2 123-31-9, 1,4-Benzenediol, uses and miscellaneous 130-15-4,
 1,4-Naphthoquinone 150-76-5, p-Methoxyphenol 552-89-6,
 o-Nitrobenzaldehyde 2182-73-2 102312-18-5
 RL: USES (Uses)
 (**photosensitive** lithog. plates contg. acid-generating compds.
 and acid-cleavable compds. and, for stable sensitivity)

IT 69468-60-6 78537-86-7 115815-82-2 116745-41-6 117646-94-3
 117647-26-4 117647-27-5 118188-70-8 119177-38-7 119201-95-5
 RL: USES (Uses)
 (**photosensitive** lithog. plates contg. acid-generating compds.
 and radical scavengers and, for stable sensitivity)

IT 93641-24-8 115111-30-3
 RL: USES (Uses)
 (**photosensitive** lithog. plates with stable sensitivity
 contg.)

IT 122-99-6, Phenyl cellosolve
 RL: USES (Uses)
 (condensation of, with acetal, acid-cleavable compd. for
photosensitive lithog. plates from)

RN 122-99-6 HCAPLUS
 CN Ethanol, 2-phenoxy- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

PhO-CH₂-CH₂-OH

L73 ANSWER 19 OF 34 HCAPLUS COPYRIGHT 1999 ACS
 AN 1987:578206 HCAPLUS
 DN 107:178206
 TI Active-energy-beam-curable coating **compositions**
 IN Sato, Koji
 PA Toyo Ink Mfg. Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62041272	A2	19870223	JP 85-179438	19850816
	JP 06023327	B4	19940330		

AB Title compns. which cure by UV or electron beam, giving coatings with
 excellent printability and adhesion, comprise (A) prepolymers prepd. by
 treating half esters obtained from carboxylic anhydrides and (meth)acrylic
 acid-epoxy compd. adducts with monoalcs., (B) radical-**polymg.**
 monomers, and optionally (C) radical **polymn.** initiators. Thus,
 380 parts Epikote 828 was treated with 130 parts acrylic acid at
 100.degree. to acid value .ltoreq.1, then treated with 266 parts
 dodecenylsuccinic anhydride for 1.5 h, and with Abitol (rosin alc.) 363,
 H₂SO₄ 5, and cyclohexane 50 parts for 16 h to give a prepolymer (I).
Resin-coated plate was sprayed with a **compn.** contg. I
 30.0, bisphenol A-ethylene oxide adduct (1:4) diacrylate 37.9,

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- photosensitizers** 7.0, hydroquinone 0.1, and pigment 25.0 parts and irradiated with UV to give a coating with cross-cut adhesion 100/100 for alkyd precoat, 70/100 for epoxy-phenolic precoat, and 60/100 for acrylic precoat, vs. 100/100, 30/100, and 0/100, resp., for the coating contg. Epikote 828 acrylate prepolymer instead of I.
- IC ICM C09D005-00
ICS C08F299-02; C09D003-48
- ICA C09D011-10
- CC 42-10 (Coatings, Inks, and Related Products)
- ST UV curable epoxy acrylate coating; printability coating epoxy **resin** acrylate; ester deriv epoxy acrylate
- IT Anhydrides
RL: USES (Uses)
(reaction products with acrylic modified epoxy **resins** and alcs., **polymers** with acrylic derivs., coatings, radiation-cured, with improved adhesion and printability)
- IT Soybean oil
RL: USES (Uses)
(epoxidized, acrylates, reaction products with acid anhydrides and alcs., **polymers** with acrylic derivs., coatings, radiation-cured)
- IT Crosslinking
(photochem., of modified epoxy **resin** blends, for coatings with improved adhesion)
- IT Coating materials
(radiation-curable, modified epoxy **resin** blend, with improved adhesion)
- IT Alcohols, compounds
RL: USES (Uses)
(reaction products, with acrylic modified epoxy **resin** acid anhydride half esters, **polymers** with acrylic derivs., coatings, radiation-cured, with improved adhesion and printability)
- IT 85-43-8D, Tetrahydrophthalic anhydride, reaction products with acrylic modified epoxy **resins** and alcs., **polymers** with acrylic derivs. 85-44-9D, Phthalic anhydride, reaction products with acrylic modified epoxy **resins** and alcs., **polymers** with acrylic derivs. 100-51-6D, Benzyl alcohol, reaction products with acrylic modified epoxy **resin** acid anhydride half esters, **polymers** with acrylic derivs. 108-30-5D, Succinic anhydride, reaction products with acrylic modified epoxy **resins** and alcs., **polymers** with acrylic derivs. 108-93-0D, Cyclohexanol, reaction products with acrylic modified epoxy **resin** acid anhydride half esters, **polymers** with acrylic derivs. 111-27-3D, Hexyl alcohol, reaction products with acrylic modified epoxy **resin** acid anhydride half esters, **polymers** with acrylic derivs. 1333-89-7D, Abitol, reaction products with acrylic modified epoxy **resin** acid anhydride half esters, **polymers** with acrylic derivs. 2561-85-5D, Dodecylsuccinic anhydride, reaction products with acrylic modified epoxy **resins** and alcs., **polymers** with acrylic derivs. 15625-89-5D, Trimethylolpropanetriacrylate, **polymers** with acrylic modified epoxy **resin** half esters 28961-43-5D, **polymers** with acrylic modified epoxy **resin** half esters 30305-68-1D, reaction products with acrylic modified epoxy **resin** acid anhydride half esters, **polymers** with acrylic derivs. 55818-57-0D, Epikote 828 acrylate, reaction products with acid anhydrides and alcs., **polymers** with acrylate derivs. 64401-02-1D, **polymers** with acrylic modified epoxy **resin** half esters 75977-67-2D, reaction products with acid anhydrides and alcs., **polymers** with acrylate derivs. 110941-74-7D, reaction products with acid anhydrides and alcs., **polymers** with acrylate derivs.
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, radiation-cured, with improved adhesion and printability)
- IT 111-27-3D, Hexyl alcohol, reaction products with acrylic modified

epoxy resin acid anhydride half esters, polymers with acrylic derivs.

RL: TEM (Technical or engineered material use); USES (Uses)

(coatings, radiation-cured, with improved adhesion and printability)

RN 111-27-3 HCAPLUS

CN 1-Hexanol (9CI) (CA INDEX NAME)

HO- (CH₂)₅-Me

L73 ANSWER 20 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1986:635876 HCAPLUS

DN 105:235876

TI Developer for exposed **negative**-working reproduction layers and its use in preparing printing plates

IN Mack, Gerhard; Mueller, Birgit; Jung, Guenter; Frass, Werner

PA Hoechst A.-G., Fed. Rep. Ger.

SO Ger. Offen., 32 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3439597	A1	19860430	DE 84-3439597	19841030
	EP 180122	A2	19860507	EP 85-113310	19851021
	EP 180122	A3	19880302		
	EP 180122	B1	19911023		
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	CA 1263050	A1	19891121	CA 85-493460	19851021
	AT 68892	E	19911115	AT 85-113310	19851021
	ZA 8508130	A	19860525	ZA 85-8130	19851023
	US 4716098	A	19871229	US 85-790153	19851023
	FI 8504215	A	19860501	FI 85-4215	19851028
	FI 83457	B	19910328		
	FI 83457	C	19910710		
	ES 548290	A1	19921016	ES 85-548290	19851028
	ES 548290	A5	19921116		
	AU 8549176	A1	19860508	AU 85-49176	19851029
	AU 578982	B2	19881110		
	BR 8505386	A	19860805	BR 85-5386	19851029
	CN 85107915	A	19861001	CN 85-107915	19851029

PRAI DE 84-3439597 19841030

EP 85-113310 19851021

AB A developer for use in processing **neg.**-working reprodn. layers is composed of water, an org. solvent, a surfactant, an alk. reacting agent, a complexing agent, a buffer substance, an emulsifier, and an alkanolic acid. The developer, which is esp. useful in prepg. printing plates, gives rapid and good development, is machine compatible and environmentally nonpolluting, and eliminates troublesome rope and thread formation in the development process. Thus, a typical developer of the invention contained water 77, ethylene glycol monophenyl ether 3.0, Graham's salt 2.0, poly(vinylmethylacetamide) 2.0, pelargonic acid 4.0, KOH 1.0, and triethanolamine 3.0 wt.%.
 ICM G03F007-00
 ICS G03F007-08

IC ICM G03F007-00

ICS G03F007-08

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **neg** working photoimaging layer developer; surfactant developer

neg photoimaging layer; alkanolic acid developer photoimaging layer

IT Carboxylic acids, uses and miscellaneous

RL: USES (Uses)

- (developer **compn.** contg., for **neg.-working** photoimaging compns.)
- IT Surfactants
(developer compns. contg., for **neg.-working** photoimaging compns.)
- IT Lithographic plates
(**neg.-working** **photosensitive** compns. for prepn. of, developers for)
- IT Printing plates
(**neg.-working** **photosensitive** compns. for, developers for)
- IT Vinyl acetal **polymers**
RL: USES (Uses)
(butyrals, reaction products with maleate and propenylsulfonyl isocyanate, **neg.-working** photoimaging compns. contg., developers for)
- IT Photoimaging **compositions** and processes
(**neg.-working**, developers for)
- IT 60-12-8 64-02-8 98-85-1 100-51-6, uses and miscellaneous 102-71-6, uses and miscellaneous 111-42-2, uses and miscellaneous 112-05-0
122-99-6 124-07-2, uses and miscellaneous 137-20-2 139-13-9
142-31-4 143-07-7, uses and miscellaneous 298-14-6 334-48-5
584-08-7 1310-58-3, uses and miscellaneous 1310-73-2, uses and miscellaneous 1320-67-8 1332-77-0 5138-18-1D, dialkyl esters, sodium salts 7601-54-9 9000-01-5 9002-89-5 9004-32-4 9004-53-9
10361-03-2 15743-44-9 25155-30-0 26616-03-5 81180-78-1
91449-92-2 105287-30-7
RL: USES (Uses)
(developer **compn.** contg., for **neg.-working** photoimaging compns.)
- IT 101-75-7 110-16-7D, esters with poly(vinyl butyral) 602-56-2
2509-26-4D, reaction products with methoxydiphenylaminediazonium sulfate, mesitylenesulfonates 3453-83-6D, salts with bismethoxymethyldiphenyl ether-methoxydiphenylaminediazonium sulfate reaction products
9011-13-6D, alkyl esters 29377-89-7D, reaction products with bismethoxymethyldiphenyl ether, acetylenesulfonates 37279-80-4
58206-31-8 84886-87-3 98448-33-0D, reaction products with poly(vinyl butyral) 105390-28-1
RL: USES (Uses)
(**neg.-working** photoimaging compns. contg., developers for)
- IT 122-99-6
RL: USES (Uses)
(developer **compn.** contg., for **neg.-working** photoimaging compns.)
- RN 122-99-6 HCAPLUS
- CN Ethanol, 2-phenoxy- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

PhO-CH₂-CH₂-OH

L73 ANSWER 21 OF 34 HCAPLUS COPYRIGHT 1999 ACS
AN 1985:532391 HCAPLUS
DN 103:132391
TI Image reproduction materials
IN Tamaoki, Nobuyuki; Katoh, Yoshio; Osako, Akitada; Kajima, Toshihiko; Tanaka, Shinichi
PA Toyobo Co., Ltd., Japan
SO Ger. Offen., 46 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

KATHLEEN FULLER STIC LIBRARY 308-4290

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3433384	A1	19850328	DE 84-3433384	19840912
	JP 60060640	A2	19850408	JP 83-170489	19830913
	JP 03026825	B4	19910412		
	US 4740450	A	19880426	US 87-1285	19870108
PRAI	JP 83-170489		19830913		
	US 84-649028		19840910		
	US 85-806908		19851209		
AB	<p>An image reprodn. material with improved resistance to surface scratching is composed of a support carrying .gtoreq.1 photosensitive resin layers and a scratch-resistant layer contg. a compd. of the formula AmBn where A is a mono- or divalent, straight or branched chain C11-20 aliph. group, B is H, OH, NH2, CN, aldehyde, CO2H or an alkylamide, alkyl ester, NH4 salt, or Group II-IV metal salt of a carboxylic acid or an alkali metal salt of a sulfonic acid; m = 1-3, and n = 1 or 2. The material has a variety of uses. Thus, an Al-coated polyester film was overcoated with a photosensitive resin compn . contg. lauryl methacrylate-methacrylic acid-Me methacrylate copolymer 15, trimethylolpropane triacrylate 12, dimedone 1, coumarin 0.5, 2-(2-chloro-1-naphthyl)-4,5-diphenylimidazole dimer 2.8, hydroquinone mono-Me ether 0.02, Me2CO 134, CHCl3 16, and MeOH 26 parts to give a 3 .mu.m (dry) thick layer. This material was then overcoated with a 0.1 wt.% soln. of stearic acid in 1,1,1-trichloroethane to give a surface with a scratch resistance of 225 g vs. 70 g for a stearic acid-free control. The film was then given a exposure to neg. original, the scratch-resistant layer removed, and the material developed to give a 5 steps and a precise halftone image of the neg.</p>				
IC	ICM G03F007-02				
	ICS G03C011-08				
CC	74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
ST	photoimaging material scratch resistant toplayer; lithog plate scratch resistant toplayer				
IT	Carboxylic acids, compounds				
	Sulfonic acids, compounds				
	RL: USES (Uses)				
	(alkali metal salts, scratch-resistant surface layers contg., for photoimaging materials)				
IT	Lithographic plates				
	(photopolymerizable compns. contg. scratch-resistant surface layer contg. carboxylic acid or carboxylic acid alkali metal salt)				
IT	Photoimaging compositions and processes				
	(photopolymerizable, scratch-resistant surface layer contg. carboxylic acid or carboxylic acid alkali metal salt for)				
IT	Carboxylic acids, uses and miscellaneous				
	RL: USES (Uses)				
	(scratch-resistant surface layer contg., for photoimaging materials)				
IT	91-64-5	126-81-8	150-76-5	9002-89-5	15625-89-5
	25133-98-6	28654-22-0	81331-14-8		25086-15-1
	RL: USES (Uses)				
	(photoimaging compns. contg., scratch-resistant surface layer contg. carboxylic acid or carboxylic acid alkali metal salt for)				
IT	57-10-3, uses and miscellaneous 57-11-4, uses and miscellaneous				
	111-61-5 111-82-0 112-53-8 112-79-8 112-80-1, uses and				
	miscellaneous 112-92-5 124-22-1 142-91-6 143-07-7, uses				
	and miscellaneous 544-63-8, uses and miscellaneous 628-97-7 629-25-4				
	646-30-0 822-16-2 1120-16-7 98293-91-5				
	RL: USES (Uses)				
	(scratch-resistant surface layer contg., for photoimaging materials)				
IT	57-11-4, uses and miscellaneous 112-92-5				
	RL: USES (Uses)				
	(scratch-resistant surface layer contg., for photoimaging materials)				
RN	57-11-4 HCAPLUS				

CN Octadecanoic acid (9CI) (CA INDEX NAME)

HO₂C-(CH₂)₁₆-Me

RN 112-92-5 HCAPLUS

CN 1-Octadecanol (8CI, 9CI) (CA INDEX NAME)

HO-(CH₂)₁₇-Me

L73 ANSWER 22 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1984:219074 HCAPLUS

DN 100:219074

TI Support for lithographic printing plates

IN Yamamoto, Takeshi; Suzuki, Norihito; Aoki, Toru; Iwaki, Akio

PA Konishiroku Photo Industry Co., Ltd. , Japan

SO Eur. Pat. Appl., 58 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 97503	A2	19840104	EP 83-303514	19830617
	EP 97503	A3	19840229		
	EP 97503	B1	19880817		

R: DE, FR, GB

US 4492740 A 19850108

US 83-503186 19830610

PRAI JP 82-105724 19820618

AB A support for lithog. printing plates which provides plates with long printing life and excellent adhesion of the **photosensitive** layer comprises an Fe material with an electrodeposited Cr layer. Thus, a 15 .mu. thick carbon steel plate was subjected to electrochem. pretreatment using an Fe cathode and an electrolyte contg. chromic acid 100 g, 64% nitric acid 0.8, H₂O 1000 L at 25.degree. (c.d. 4 A/cm²) for 1 min, washed, placed in a soln. contg. chromic acid 430, Ba nitrate 3.8, ammonium hydrofluoride 5, AcOH 0.2, Ba fluoride 0.1 kg, 64% HNO₃ 1.2, H₂O 1000 L and subjected to electrolysis using a Pb plate anode (c.d. 20 A/cm²) at 30.degree. for 3 min, washed with H₂O, dipped in an aq. 5% caustic soda soln. at 40.degree. for 1 min, washed with H₂O, dipped in an aq. CMC Na salt soln. (0.07 wt.%) for 1 min, washed, and dried. The obtained support was coated with a **compn.** contg. Zn oxide 95, 50% methylsilicone **resin** 80, PhMe 100, EtOH 25 parts to give a 1 .mu. layer, **neg.** charged, imagewise exposed, toned with a polystyrene-based toner, and heat-fixed to give a printing plate which yielded 300,000 excellent prints.

IC B41N001-08

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST lithog plate support electrodeposited chromium; iron chromium electrodeposited lithog plate

IT Epoxy **resins**, uses and miscellaneous

Phenolic **resins**, uses and miscellaneous

Siloxanes and Silicones, uses and miscellaneous

RL: PREP (Preparation)

(**photosensitive** layer contg., in prepn. of lithog. printing plate with support from iron material with electrodeposited chromium layer)

IT Lithographic plates

(supports, from iron material with electrodeposited chromium layer)

KATHLEEN FULLER STIC LIBRARY 308-4290

- IT 111-42-2, uses and miscellaneous 122-99-6 75216-53-4
 RL: USES (Uses)
 (developer **compn.** contg., in prepn. of lithog. printing plates, with support from iron material contg. electrodeposited chromium layer)
- IT 7440-47-3, uses and miscellaneous
 RL: USES (Uses)
 (electrodeposition of layer of, on iron plate material, in prepn. of lithog. printing plate support)
- IT 64-19-7, uses and miscellaneous 1341-49-7 7697-37-2, uses and miscellaneous 7738-94-5 7787-32-8 10022-31-8
 RL: USES (Uses)
 (electrolyte soln. contg., for electrodeposition of chromium layer on iron plate material, in prepn. of lithog. printing plate support)
- IT 110-80-5 147-14-8 1314-13-2, uses and miscellaneous 11121-48-5
 RL: USES (Uses)
 (electrophotog. plate for lithog. printing plate fabrication with coating contg., supports for, from iron material with electrodeposited chromium layer)
- IT 1308-38-9, uses and miscellaneous
 RL: USES (Uses)
 (lithog. printing plate support from iron material with electrodeposited chromium layer contg.)
- IT 7439-89-6, uses and miscellaneous 11121-90-7, uses and miscellaneous 12597-69-2, uses and miscellaneous
 RL: USES (Uses)
 (lithog. printing plate support from, electrodeposition of chromium layer on)
- IT 1328-54-7 25085-50-1 25086-36-6 36451-09-9 62655-78-1 73904-07-1 77347-95-6 81031-52-9 84135-66-0
 RL: USES (Uses)
 (lithog. printing plate with **photosensitive** coating contg., supports for, comprising iron material with electrodeposited chromium layer)
- IT 86-93-1 92-43-3 123-31-9, uses and miscellaneous 1310-73-2, uses and miscellaneous 7757-82-6, uses and miscellaneous 7772-98-7
 RL: USES (Uses)
 (photog. developer contg., in prepn. of lithog. printing plates, with support from iron material contg. electrodeposited chromium layer)
- IT 106-91-2D, reaction products with xylylenediamine 3524-62-7 26603-36-1D, reaction products with glycidyl methacrylate 39921-03-4 59190-77-1
 RL: USES (Uses)
 (photopolymeric **compn.** contg., for prepn. for printing plate, support for, from iron material contg. electrodeposited chromium layer)
- IT 122-99-6
 RL: USES (Uses)
 (developer **compn.** contg., in prepn. of lithog. printing plates, with support from iron material contg. electrodeposited chromium layer)
- RN 122-99-6 HCAPLUS
 CN Ethanol, 2-phenoxy- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

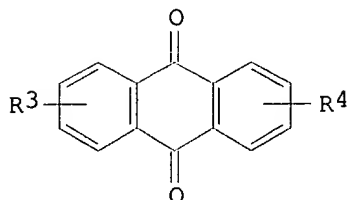
PhO-CH₂-CH₂-OH

L73 ANSWER 23 OF 34 HCAPLUS COPYRIGHT 1999 ACS
 AN 1984:15330 HCAPLUS
 DN 100:15330
 TI **Photosensitive resin compositions**
 PA Hitachi, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.

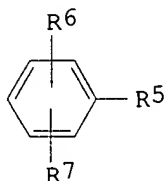
KATHLEEN FULLER STIC LIBRARY 308-4290

CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57168902	A2	19821018	JP 81-53177	19810410
GI					



I



II

AB **Photosensitive resin** compns. are composed of (1)
 80-99.9 wt.% of a **polymer** having repeating units of the formula
 $\text{CH}_2\text{CMeC}(\text{CO-p-C}_6\text{H}_4\text{R})$ ($\text{R} = \text{H, Me, MeO, Cl, Br, I, NH}_2, \text{NMe}_2$) 10-100 and
 other repeating units from vinyl monomers 0-90 mol% and (2) 0.1-20 wt.% of
 .gtoreq.1 sensitizer selected from $\text{R}_1\text{C}_6\text{H}_4\text{COC}_6\text{H}_4\text{R}_2$ ($\text{R}_1, \text{R}_2 = \text{H, alkyl,}$
 $\text{alkoxy, OH, NH}_2, \text{NO}_2, \text{halo}$), I ($\text{R}_3, \text{R}_4 = \text{H, alkyl, alkoxy, OH, NH}_2, \text{NO}_2,$
 halo), II ($\text{R}_5 = \text{OR}_8, \text{CO}_2\text{R}_8$; $\text{R}_6, \text{R}_7 = \text{H, alkyl, alkoxy, OH, NH}_2, \text{NO}_2, \text{halo}$;
 $\text{R}_8 = \text{H, alkyl}$), and $\text{R}_9\text{C}_6\text{H}_4\text{COZC}_6\text{H}_4\text{R}_{10}$ ($\text{R}_9, \text{R}_{10} = \text{H, alkyl, alkoxy, OH, NH}_2,$
 NO_2, halo ; $\text{Z} = \text{CO, CHOH}$). The **photosensitive** compns. are esp.
 useful as pos.-working UV resists. Thus, Me methacrylate-Ph isopropenyl
 ketone copolymer 95 and p-methoxybenzoic acid 5 parts were mixed in Me
 isobutyl ketone to give a resist soln., coated on a Si wafer, imagewise
 exposed to a Hg lamp, and developed to form high-resoln. resist patterns.

IC C08F002-50; C08K005-06; C08K005-07; C08K005-10; C08L029-12; G03C001-72;
 G03F007-10; H01L021-302; H05K003-06

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)

ST photoresist isopropenyl phenyl ketone **polymer**

IT Resists
 (photo-, pos.-working, UV-sensitive, Ph isopropenyl ketone deriv.
polymers as)

IT 65-85-0, uses and miscellaneous 84-47-9 84-51-5 84-54-8
 91-10-1 98-73-7 99-04-7 99-93-4 99-94-5 100-09-4 118-90-1
 119-53-9 119-61-9, uses and miscellaneous 134-81-6 134-85-0
 579-75-9 611-94-9 1137-42-4 1144-74-7 2835-77-0 74033-01-5
 78380-18-4 78380-19-5 87961-56-6 87961-57-7

RL: TEM (Technical or engineered material use); USES (Uses)
 (photoresist compns. contg., UV-sensitive pos.-working)

IT 121-97-1P 3644-57-3P 3644-59-5P 3644-61-9P 6281-80-7P
 79219-33-3P 87961-00-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and reaction of)

IT 6230-73-5P 42071-66-9P 84598-15-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

IT 123-62-6

RL: RCT (Reactant)
 (reaction of, with anisole)

IT 79-03-8

RL: RCT (Reactant)
 (reaction of, with halobenzenes)

IT 93-55-0 5337-93-9

RL: RCT (Reactant)
 (reaction of, with paraformaldehyde and piperidine hydrochloride)

KATHLEEN FULLER STIC LIBRARY 308-4290

IT 6091-44-7
 RL: RCT (Reactant)
 (reaction of, with paraformaldehyde and propiophenone derivs.)

IT 100-66-3, reactions
 RL: RCT (Reactant)
 (reaction of, with propionic anhydride)

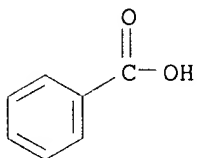
IT 108-86-1, reactions 108-90-7, reactions 591-50-4
 RL: RCT (Reactant)
 (reaction of, with propionyl chloride)

IT 30525-89-4
 RL: RCT (Reactant)
 (reaction of, with propiophenone derivs. and piperidine hydrochloride)

IT 65-85-0, uses and miscellaneous
 RL: **TEM (Technical or engineered material use); USES (Uses)**
 (photoresist compns. contg., UV-sensitive pos.-working)

RN 65-85-0 HCAPLUS

CN Benzoic acid (7CI, 8CI, 9CI) (CA INDEX NAME)



L73 ANSWER 24 OF 34 HCAPLUS COPYRIGHT 1999 ACS
 AN 1982:536655 HCAPLUS
 DN 97:136655
 TI Light-sensitive **compositions**
 IN Goto, Kiyoshi; Yamamoto, Takeshi; Kita, Noriyasu
 PA Konishiroku Photo Industry Co., Ltd. , Japan
 SO Ger. Offen., 20 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3144656	A1	19820701	DE 81-3144656	19811110
	JP 57084450	A2	19820526	JP 80-160494	19801113
PRAI	JP 80-160494		19801113		

AB A presensitized pos.-working material for printing plates or printed circuits, developable with an aq. alk. soln., carries on a metal, film, or paper support a **photosensitive** o-naphthoquinoediazide-novolac **resin** condensate, a basic triphenylmethane (or azine or anthraquinone) dye 1-30% of the diazide, a halogen-contg. arom. diazonium salt as fluoride of P, B, As, or Sb or as chloride of Sn, Bi, or Zn, sol. in org. solvents, 0.5-8%, and a naphthoquinonediazide with .gtoreq.1 CO₂R or SO₃R (R = alkyl, aryl, or aralkyl) ester group 1-50%. This ester lowers the amt. of diazonium salt required to improve the visibility of the image, which in larger amts. interferes with the sensitivity and developability of the material. Thus, a 2.78 g/m² coating was obtained on a 240 .mu. sand-blasted and brush-polished Al sheet by applying a soln. of a condensate of 1,2-naphthoquinone-2-diazido-5-sulfonyl chloride with a m-cresol-HCHO novolac **resin** 1.0, 1,2-naphthaoquinone-2-diazido-4-sulfonic acid 2,4-dinitriophenyl ester 0.1, cresol-HCHO **resin** 3.0, p-diazodiphenylamine hexafluorophosphate 0.04, and Victoria Pure Blue 0.04 in (-CH₂OH)₂ 40 parts and drying 3 min at 110.degree.. Immediately after exposure to a 2-kW metal halide lamp through a pos. transparency at 1 m for 70 s, a contrast image was visible, and after 45 s development in a 4% aq. Na₂SiO₃ soln. the plate yielded

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numerous offset prints of excellent quality.

IC G03F007-08; G03C001-52

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photoresist diazonium salt naphthoquinonediazide; presensitized lithog plate **photosensitive compn**; elec circuit printed **photosensitive compn**

IT Lithographic plates
(sensitized, **photosensitive** compns. contg. diazonium salt and naphthoquinone diazide for)

IT Resists
(photo-, pos.-working, contg. diazonium salt and naphthoquinone diazide)

IT Electric circuits
(printed, **photosensitive** compns. contg. diazonium salt and naphthoquinone diazide for fabrication of)

IT 62655-78-1
RL: USES (Uses)
(in cresol-formaldehyde copolymer 1,2-naphthaquinone-2-diazido-5-sulfonate **photosensitive** compns. contg. diazodiphenylene hexafluorophosphate and, for presensitized lithog. plate fabrication)

IT 68541-73-1
RL: USES (Uses)
(**photosensitive compn.** contg. cresol-formaldehyde naphthoquinone diazidosulfonate and, for presensitized lithog. plate fabrication)

IT 57-11-4, uses and miscellaneous 1317-40-4 28935-25-3
82970-40-9
RL: USES (Uses)
(**photosensitive compn.** contg., for presensitized lithog. plate fabrication)

IT 71244-40-1 82970-39-6
RL: USES (Uses)
(**photosensitive** compns. contg. acid aldehyde-resorcinol copolymer naphthoquinone diazidosulfonate and diazodiphenylamine tetrafluoroborate and, for presensitized lithog. plate fabrication)

IT 65722-01-2 75040-15-2
RL: USES (Uses)
(**photosensitive** compns. contg. cresol-formaldehyde copolymer naphthoquinone diazidosulfonate and diazodiphenylamine hexafluorophosphate and, for presensitized lithog. plate fabrication)

IT 54990-32-8 68584-99-6
RL: USES (Uses)
(**photosensitive** compns. contg. diazodiphenylamine fluorophosphate and, for presensitized lithog. plate fabrication)

IT 83045-84-5
RL: USES (Uses)
(**photosensitive** compns. contg. diazodiphenylamine tetrafluoroborate and, for presensitized lithog. plate fabrication)

IT 9016-83-5
RL: USES (Uses)
(**photosensitive** compns. contg., for presensitized lithog. plate fabrication)

IT 57-11-4, uses and miscellaneous
RL: USES (Uses)
(**photosensitive compn.** contg., for presensitized lithog. plate fabrication)

RN 57-11-4 HCAPLUS

CN Octadecanoic acid (9CI) (CA INDEX NAME)

HO₂C-(CH₂)₁₆-Me

L73 ANSWER 25 OF 34 HCAPLUS COPYRIGHT 1999 ACS
 AN 1982:172187 HCAPLUS
 DN 96:172187
 TI Polyamide printing plate having an improved contact with an image-bearing film
 IN Fujikawa, Junichi; Togashi, Osamu; Kashio, Shigetara
 PA Toray Industries, Inc. , Japan
 SO Eur. Pat. Appl., 25 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 46047	A1	19820217	EP 81-303547	19810803
	EP 46047	B1	19840620		
	R: DE, FR, GB, IT				
	JP 57034557	A2	19820224	JP 80-108630	19800807
	JP 63014337	B4	19880330		
	US 4576897	A	19860318	US 84-684972	19841221
PRAI	JP 80-108630		19800807		
	US 81-288324		19810730		
	US 83-545113		19831025		

AB The contact of an image-bearing film to the surface of a **photosensitive** polyamide printing plate is improved by forming an anti-stickness layer comprising a **polymer** sol. or dispersible in a developer and having a thickness of 0.2-20 .mu.. Thus, a 100 .mu. polyester film support was coated with a 15 wt.% soln. of a partially saponified poly(vinyl acetate) in a MeOH-H₂O (60/40) mixt., dried at 120.degree. for 1 min to form a 2 .mu. coating, overcoated with a 10 wt.% soln. contg. 90 parts of copolyamide of caprolactam-adipic acid-hexamethylenediamine-poly(ethylene glycol diamine) and 10 parts of a partially saponified poly(vinyl acetate) in a MeOH-H₂O (60/40) mixt., dried at 120.degree. for 30 min (the total thickness of both layers was 3.5 .mu.), and applied under pressure to an EtOH-wetted surface of a **photosensitive polymer** layer coated on a metal support (the **photosensitive** layer contg. caprolactam-adipic acid-hexamethylenediamine-poly(ethylene glycol diamine) copolyamide reacted with a small amt. of glycidyl methacrylate, an acrylate type vinyl monomer and di-Me benzyl ketal) to transfer a matte coating. After sepn. of the cover film, the obtained printing plate was contacted with a **neg.**, exposed, and developed to provide a very sharp image.

IC G03C001-70; G03C001-68; G03F007-10

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST polyamide printing plate matte cover; antisticking layer polyamide printing plate

IT Vinyl acetal **polymers**

RL: USES (Uses)

(partially saponified, **photosensitive** polyamide printing plate with anti-sticking layer contg.)

IT Printing plates

(**photosensitive** polyamide-based **compn.** with anti-sticking layer for fabrication of)

IT Polyamides, uses and miscellaneous

RL: PREP (Preparation)

(**photosensitive** printing plate contg., prepn. of anti-sticking layer for)

IT 25038-54-4D, N-methoxymethylated

RL: USES (Uses)

(in printing plate fabrication)

IT 111-46-6, uses and miscellaneous 123-31-9, uses and

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miscellaneous 574-09-4 3524-62-7 25038-54-4D, methoxymethylated
 27030-83-7D, quaternarized with acrylic acid 60472-30-2
 RL: USES (Uses)
 (photosensitive polyamide printing plate contg., prepn. of
 anti-sticking layer for)
 IT 9002-89-5 79321-68-9 81771-74-6
 RL: USES (Uses)
 (photosensitive polyamide printing plate with anti-sticking
 layer contg.)
 IT 24650-42-8 81771-75-7
 RL: USES (Uses)
 (photosensitive polymer printing plate contg.,
 prepn. of anti-sticking layer for)
 IT 50586-48-6
 RL: USES (Uses)
 (printing plate anti-sticking layer contg.)
 IT 111-46-6, uses and miscellaneous
 RL: USES (Uses)
 (photosensitive polyamide printing plate contg., prepn. of
 anti-sticking layer for)
 RN 111-46-6 HCAPLUS
 CN Ethanol, 2,2'-oxybis- (9CI) (CA INDEX NAME)

HO-CH₂-CH₂-O-CH₂-CH₂-OH

L73 ANSWER 26 OF 34 HCAPLUS COPYRIGHT 1999 ACS
 AN 1982:133223 HCAPLUS
 DN 96:133223
 TI Light-sensitive color proofing film with surfactant in a light-sensitive
 coating
 IN Liu, Shuchen
 PA American Hoechst Corp., USA
 SO U.S., 9 pp. Cont.-in-part of U.S. Ser. No. 45,468, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4299906	A	19811110	US 80-154737	19800530
	CA 1146397	A1	19830517	CA 80-353135	19800530
	JP 56019055	A2	19810223	JP 80-72855	19800602
	JP 01046860	B4	19891011		

PRAI US 79-45468 19790601
 AB A color proofing film having increased developability is described. The
 film consists of a substantially transparent polymeric base sheet carrying
 a thin coating of a light-sensitive compn. contg. a colorant, a
 light-sensitive material, and an effective amt. of an anionic surfactant
 obtained by the reaction of P205 with a condensation product of an
 alkylene oxide and an org. compd. contg. a reactive H. Thus, a biaxially
 oriented transparent poly(ethylene terephthalate) film was coated with a
 compn. contg. an acrylic polymer 5.1, Orasol Yellow 3GLC
 0.86, Orasol Black RL 6.02, o-quinone diazide 12.04, and GAFAC
 RE-610 6.00 g and dried. The resulting sheet was employed as a black pos.
 color proofing film which was dry and tack-free. Its reflectance on the
 Hunter L scale was 11.5.

IC G03C001-78; G03C001-60; G03C001-68
 NCL 430157000
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 ST color proofing film printing; surfactant photosensitive color
 KATHLEEN FULLER STIC LIBRARY 308-4290

proofing film; phosphate ester color proofing film; developability color proofing film surfactant

IT Printing
(color proofing films for, contg. anionic surfactant for increased developability)

IT Acrylic **polymers**, uses and miscellaneous
RL: USES (Uses)
(**photosensitive** color proofing film contg. anionic surfactant and, for increased developability)

IT Surfactants
(anionic, **photosensitive** color proofing films contg., for increased developability)

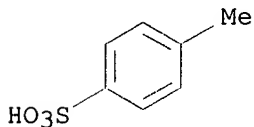
IT 81-88-9 **104-15-4**, uses and miscellaneous 602-56-2 989-38-8
4024-72-0 12239-74-6 15625-89-5 25086-15-1 25215-62-7 37279-80-4
61725-88-0 61901-87-9 81180-38-3
RL: USES (Uses)
(**photosensitive** color proofing film contg. anionic surfactant and, for increased developability)

IT 9046-01-9 12624-06-5 12674-35-0 39464-64-7 51811-79-1 77323-36-5
77323-37-6 77323-38-7 77430-62-7 77430-63-8 77430-64-9
RL: USES (Uses)
(**photosensitive** color proofing films contg., for increased developability)

IT **104-15-4**, uses and miscellaneous
RL: USES (Uses)
(**photosensitive** color proofing film contg. anionic surfactant and, for increased developability)

RN 104-15-4 HCAPLUS

CN Benzenesulfonic acid, 4-methyl- (9CI) (CA INDEX NAME)



L73 ANSWER 27 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1979:475374 HCAPLUS

DN 91:75374

TI Degradable synthetic **resin compositions**

IN Odate, Ryoji; Miyahara, Yuuichi

PA Shiseido Co., Ltd., Japan

SO U.S., 9 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4156666	A	19790529	US 75-627818	19751031
AB	<p>The title degradable resin compns. consist of polyethylene [9002-88-4] or polypropylene [9003-07-0], .ltoreq.10 wt.% stearic acid [57-11-4] or myristyl myristate (I) [3234-85-3] as degridn. promoter, and, optionally, 10-60 wt.% CaCO₃ filler to reduce the heat of combustion of the compn. and to promote photodegrdn. The photodegradability is also improved by the presence of benzophenone [119-61-9]. Thus, a sample of 1.00-mm thick polyethylene sheet contg. 5% I lost .apprx.20% of its tensile strength when exposed (JIS-L-0824) to a carbon arc fade meter for 120 h on one side and 120 h on the other, and a sample contg. 5% I and 40% CaCO₃ lost .apprx.50% of its strength during the same exposure test.</p>				

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IC C08L091-00
 NCL 260023000H
 CC 36-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 19
 ST polyethylene **compn** degradable; polypropylene **compn**
 degradable; degradability polyolefin **compn**; photodegradability
 polyolefin **compn**; stearic acid promoter photodegrdn; myristyl
 myristate promoter photodegrdn; fatty acid promoter photodegrdn;
 benzophenone **photosensitizer** polyolefin
 IT Bottles
 (polyethylene, photodegradable)
 IT Agriculture and Agricultural chemistry
 (polyolefin films for, degradable)
 IT **Polymer** degradation catalysts
 (photochem., myristyl myristate and steric acid, for polyethylene and
 polypropylene)
 IT 57-11-4, reactions
 RL: RCT (Reactant)
 (degrdn. promoters, for polyethylene and polypropylene compns.)
 IT 3234-85-3
 RL: USES (Uses)
 (degrdn. promoters, for polyethylene and polypropylene compns.)
 IT 471-34-1, uses and miscellaneous
 RL: USES (Uses)
 (fillers, polyethylene and polypropylene compns. contg.,
 photodegradable)
 IT 9002-88-4 9003-07-0
 RL: USES (Uses)
 (photodegradable)
 IT 119-61-9, uses and miscellaneous
 RL: USES (Uses)
 (**photosensitizers**, polyethylene and polypropylene compns.
 contg., degradable)
 IT 57-11-4, reactions
 RL: RCT (Reactant)
 (degrdn. promoters, for polyethylene and polypropylene compns.)
 RN 57-11-4 HCAPLUS
 CN Octadecanoic acid (9CI) (CA INDEX NAME)

HO₂C-(CH₂)₁₆-Me

L73 ANSWER 28 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1978:520928 HCAPLUS

DN 89:120928

TI Light-sensitive copying **composition**

IN Palmer, Roland

PA Hoechst A.-G., Ger.

SO Ger. Offen., 54 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2739774	A1	19780309	DE 77-2739774	19770903
	DE 2739774	C2	19891130		
	AU 7728408	A1	19790308	AU 77-28408	19770831
	AU 520188	B2	19820121		
	BE 858410	A1	19780306	BE 77-180680	19770905
	SE 7709953	A	19780309	SE 77-9953	19770905
	NL 7709745	A	19780310	NL 77-9745	19770905

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FR 2364488	A1	19780407	FR 77-26804	19770905
FR 2364488	B1	19800118		
BR 7705952	A	19780627	BR 77-5952	19770906
ZA 7705351	A	19780726	ZA 77-5351	19770906
ES 462165	A1	19781101	ES 77-462165	19770906
AT 7706398	A	19790615	AT 77-6398	19770906
AT 354843	B	19790125		
US 4186017	A	19800129	US 77-830771	19770906
GB 1589225	A	19810507	GB 77-37161	19770906
CA 1112092	A1	19811110	CA 77-286118	19770906
DK 7703983	A	19780309	DK 77-3983	19770907
JP 53033116	A2	19780328	JP 77-108336	19770908
PRAI LU 76-75749		19760908		
AB	<p>Neg.-working, light-sensitive copying compns. for the prodn. of high-prodn. offset printing plates, still copies, color sepns., screens, and etch resists are composed of a diazonium salt condensation product, a polyurethane that is a prepolymer with free isocyanato end groups, and an acid stabilizer. A non-drying alkyd resin may also be added. Thus, a typical compn. contained 31.0 wt parts of a polyurethane prepolymer with 7.0% free NCO end groups from 1,4-butanediol 1, polypropylene glycol (mol. wt. 1000) 1, 2,4-toluenediisocyanate 8, and 1,1,1-trimethylolpropane 2 mols, 20.2 wt. parts of an alkyd resin, 31.2 wt. parts of paraformaldehyde condensate with diphenylamine-4-diazonium chloride or 3-methoxydiphenylamine-4-diazonium chloride, 3.2 wt. % of p-O2NC6H4N:NC6H4N₂ (CH₂CH₂OH)₂, 0.8 wt. % of metanil yellow, and 1800.0 wt. parts of Me glycol.</p>			
IC	G03C001-54			
CC	74-8 (Radiation Chemistry, Photochemistry, and Photographic Processes)			
ST	photoimaging compn diazonium compd; urethane polymer diazo photoimaging; acid stabilizer diazo photoimaging; lithog plate diazonium compd; photoresist diazonium compd; photoduplication diazonium compd			
IT	Photoimaging compositions and processes (contg. diazonium salt, polyurethane, and acid stabilizer)			
IT	Urethane polymers , uses and miscellaneous RL: USES (Uses) (photoimaging compns. contg. diazonium salt, acid stabilizer, and)			
IT	Alkyd resins RL: USES (Uses) (photoimaging compns. contg. diazonium salt, urethane polymer , acid stabilizer, and)			
IT	Diazo process Lithographic plates Photoduplication (photosensitive compns. contg. diazonium salt, polyurethane, and acid stabilizer for)			
IT	Resists (photo-, photosensitive compns. contg. diazonium salt, polyurethane, and acid stabilizer for)			
IT	2509-26-4D, reaction product with methoxydiphenylaminediazonium sulfate 58622-64-3 RL: USES (Uses) (photoimaging compn. contg.)			
IT	7664-93-9, uses and miscellaneous RL: USES (Uses) (photoimaging compns. contg. urethane polymer , diazonium compd. and)			
IT	67326-47-0D, reaction product with dinitrochlorobenzenediazonium salt RL: USES (Uses) (photoimaging compns. contg. urethane polymer , acid stabilizer, and)			
IT	29377-89-7D, reaction product with bis(methoxymethyldiphenyl) ether RL: USES (Uses)			

(photoimaging compns. contg. acid stabilizer, urethane **polymer** and)

IT 52581-70-1
RL: USES (Uses)
(photoimaging compns. contg. diazonium salt, acid stabilizer, and)

IT 7664-38-2, uses and miscellaneous
RL: USES (Uses)
(photoimaging compns. contg. diazonium salt, urethane **polymer** and)

IT 147-14-8 547-58-0 548-62-9 587-98-4 989-38-8 2872-52-8
67366-77-2
RL: USES (Uses)
(photoimaging compns. contg. diazonium salt, urethane **polymer**, acid stabilizer, and)

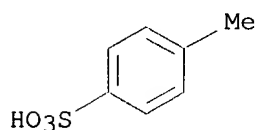
IT 104-15-4, properties
RL: PRP (Properties)
(photoimaging compns. contg. diazonium salt, urethane **polymer**, and)

IT 7601-90-3, uses and miscellaneous 11113-50-1
RL: USES (Uses)
(photoimaging compns. contg. diazonium salt, urethane **polymer**, and)

IT 29989-17-1 67325-90-0
RL: USES (Uses)
(photoimaging compns. contg. urethane **polymer**, acid stabilizer and)

IT 104-15-4, properties
RL: PRP (Properties)
(photoimaging compns. contg. diazonium salt, urethane **polymer**, and)

RN 104-15-4 HCAPLUS
CN Benzenesulfonic acid, 4-methyl- (9CI) (CA INDEX NAME)



L73 ANSWER 29 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1978:451423 HCAPLUS

DN 89:51423

TI Electrophotographic film

IN Takahata, Kei; Murakami, Hajime

PA Ishihara Sangyo Kaisha, Ltd., Japan

SO Ger. Offen., 37 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2643059	A1	19780406	DE 76-2643059	19760924
	DE 2643059	B2	19790222		
	DE 2643059	C3	19791018		

AB Electrophotog. recording materials are described which consist of a conductive support carrying a **photosensitive** layer from powd. TiO₂ contg. 0.001-5 mol % (based on the TiO₂) of Li, Zn, Ca, and Ba in its crystal structure and a nonconductive acrylic **polymer** binder. The metal-doped TiO₂ may be obtained by calcining TiO₂ at 700-980.degree., thermal hydrolysis of an acid aq. soln. contg. hydrated

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TiO₂ and calcining at 700-980.degree., or oxidative decompn. of TiCl₄ in the vapor phase at 700-980.degree.. A sensitizer may also be added to the surface of the material to improve its electrophotog. properties. Thus, hydrated TiO₂ (prepd. by hydrolysis of TiCl₄) contg. ZnO 0.5 mol % was calcined at 800.degree. and then pulverized to give TiO₂ particles of .apprx.0.5 .mu.. A **photosensitive** layer prepd. from this TiO₂ and Styresol 4440 had an original charge of 980 V, a charge-retention in the dark of 80%, and a potential half-value of 1.6 s vs. 300 V, 62%, and 1.45 s for an uncalcined material.

IC G03G005-087

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST calcined titanium dioxide photoconductor electrophotog

IT Acrylic **polymers**, uses and miscellaneous

Alkyd **resins**

RL: USES (Uses)

(binders, for electrophotog. photoconductive compns. contg. calcined metal-doped titanium dioxide)

IT Photography, electro-, photoconductors

(calcined metal-doped titanium dioxide as)

IT Alcohols, uses and miscellaneous

Carboxylic acids, uses and miscellaneous

Phenols, uses and miscellaneous

RL: USES (Uses)

(electrophotog. photoconductive compns. contg. calcined metal-doped titanium oxide and, for improved properties)

IT Naphthenic acids, compounds

RL: USES (Uses)

(zinc salts, electrophotog. photoconductive compns. contg. acrylic **polymer** and calcined titanium dioxide doped with)

IT Alkyd **resins**

(styrene-modified, binders, for electrophotog. photoconductive compns. contg. calcined metal-doped titanium dioxide)

IT 66795-59-3 66795-61-7

RL: USES (Uses)

(binder, for electrophotog. photoconductive **compn.** contg. calcined metal-doped titanium dioxide)

IT 53570-70-0 66812-94-0

RL: USES (Uses)

(binders, for electrophotog. photoconductive compns. contg. calcined metal-doped titanium dioxide)

IT 13463-67-7, properties

RL: PRP (Properties)

(electrophotog. photoconductive compns. contg. acrylic **polymer** and calcined metal-doped)

IT 62-54-4 142-72-3 546-89-4 557-09-5 557-34-6 7439-93-2, uses and miscellaneous 7439-95-4, uses and miscellaneous 7440-66-6, uses and miscellaneous 7440-66-6D, naphthenates 7440-70-2, uses and miscellaneous

RL: USES (Uses)

(electrophotog. photoconductive compns. contg. acrylic **polymer** and calcined titanium dioxide doped with)

IT 62-53-3, uses and miscellaneous 85-44-9 95-54-5, uses and miscellaneous 97-53-0 106-44-5, uses and miscellaneous 107-45-9 108-95-2, uses and miscellaneous 111-40-0 111-87-5, uses and miscellaneous 112-53-8 112-80-1, uses and miscellaneous 112-92-5 122-39-4, uses and miscellaneous 25497-48-7 66795-51-5 66795-52-6 66796-19-8 66796-20-1 66812-96-2

RL: USES (Uses)

(electrophotog. photoconductive compns. contg. calcined metal-doped titanium oxide and, for improved properties)

IT 72-48-0 81-61-8 81-88-9 518-47-8 553-24-2 632-99-5 989-38-8 1787-61-7 2429-74-5 2650-18-2 3374-30-9 3486-30-4 3564-18-9 4712-70-3 6415-98-1 18472-89-4 28631-66-5 37187-87-4 62152-67-4 66796-36-9 66796-37-0 66796-38-1 66812-95-1

KATHLEEN FULLER STIC LIBRARY 308-4290

RL: USES (Uses)
 (sensitizer, for electrophotog. photoconductive compns. contg. calcined metal-doped titanium dioxide)
 IT 7550-45-0, properties 13693-11-3
 RL: USES (Uses)
 (thermal hydrolysis of aq. solns. of, in titanium dioxide prepn.)
 IT 112-92-5
 RL: USES (Uses)
 (electrophotog. photoconductive compns. contg. calcined metal-doped titanium oxide and, for improved properties)
 RN 112-92-5 HCAPLUS
 CN 1-Octadecanol (8CI, 9CI) (CA INDEX NAME)

HO- (CH₂)₁₇-Me

L73 ANSWER 30 OF 34 HCAPLUS COPYRIGHT 1999 ACS
 AN 1978:81820 HCAPLUS
 DN 88:81820
 TI Heat-developable, light-sensitive material for electrostatic imaging
 IN Kobayashi, Hajime; Yano, Yasuhiro; Endo, Ichiro
 PA Canon K. K., Japan
 SO Ger. Offen., 100 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2702227	A1	19770728	DE 77-2702227	19770120
	JP 52090305	A2	19770729	JP 76-6497	19760123
	JP 57024914	B4	19820526		
	JP 52090306	A2	19770729	JP 76-7732	19760126
	JP 57029698	B4	19820624		
	JP 52090308	A2	19770729	JP 76-7734	19760126
	JP 57029699	B4	19820624		
	JP 52090924	A2	19770730	JP 76-7731	19760126
	JP 60004454	B4	19850204		
	GB 1574844	A	19800910	GB 77-1382	19770113
	FR 2339186	A1	19770819	FR 77-1818	19770121
	FR 2339186	B1	19810807		
	CA 1104862	A1	19810714	CA 77-270237	19770121
	AU 7721565	A1	19780803	AU 77-21565	19770124
	AU 511450	B2	19800821		
	US 4273845	A	19810616	US 80-125672	19800228
PRAI	JP 76-6497		19760123		
	JP 76-7731		19760126		
	JP 76-7732		19760126		
	JP 76-7734		19760126		
	US 77-761368		19770121		

AB Heat-developable, **photosensitive** materials for the making of electrostatic images with improved electrostatic characteristics consist of a support coated with a **compn.** contg. a Ag salt of an org. acid, an org. acid, a halide, such as a Ag halide, or a compd. that reacts with the org. Ag salt to form a Ag halide, a reducing agent, and an elec. insulating binder with a dielec. strength of .gtoreq.10 kV/mm and an equil. moisture value of .ltoreq.3.0% at a relative humidity of 20-100%. The materials may also carry a kaolin top layer. Thus, to a dispersion contg. a Ag behenate-behenic acid (80:20) mixt. 25, PhMe 120, and MeCOEt 120 g were added poly(vinyl butyral) (as a 20 wt.% EtOH soln.) 60 and EtOH 40 g. After mixing, a soln. of mercury acetate 120 mg in MeOH 25 mL, a soln. of CaBr₂ 200 mg in MeOH 25 mL, and phthalazinone 2.5 g were

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added and the mixt. coated on a **resin**-coated paper and dried to give an 8 .mu. thick layer. An overcoating contg. 2,2'-methylenebis(6-tert-butyl-p-cresol) 1.5, phthalazinone 0.3, cellulose acetate 10, and Me2CO 30 g was then added and dried to give a 4 .mu. thick layer. This material was then imagewise exposed (2500 lx) to a pos. image for 20 s by using a W source and developed for 5 s at 130.degree. to give a **neg.** visible image that could be used as an electrostatic master to produce up to 1000 quality prints.

IC G03G007-00
 CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic Processes)
 ST photothermog master electrostatic imaging
 IT Terpenes and Terpenoids, **polymers**
 RL: PREP (Preparation)
 (binders, for photothermog. copying materials for prepn. of electrog. masters)
 IT Photothermography
 (**photosensitive** compns. for, for prodn. of masters for electrostatic imaging)
 IT Vinyl acetal **polymers**
 RL: PREP (Preparation)
 (butyrals, binders, for photothermog. copying materials for prepn. of electrog. masters)
 IT Electrophotography
 (masters, photothermog. copying material for prepn. of)
 IT 9003-20-7 9003-53-6 9004-35-7 9004-36-8 24937-78-8
 RL: USES (Uses)
 (binders, for photothermog. copying materials for prepn. of electrog. masters)
 IT 57-11-4, uses and miscellaneous 79-15-2 112-85-6 119-39-1
 119-47-1 142-71-2 143-07-7, uses and miscellaneous 373-02-4
 543-90-8 905-97-5 1600-27-7 2489-05-6 3264-82-2 5931-89-5
 7447-40-7, uses and miscellaneous 7447-41-8, uses and miscellaneous
 7550-35-8 7647-14-5, uses and miscellaneous 7647-15-6, uses and
 miscellaneous 7647-17-8, uses and miscellaneous 7681-11-0, uses and
 miscellaneous 7681-82-5, uses and miscellaneous 7758-02-3 7779-88-6
 7787-69-1 7789-17-5 7789-39-1 7789-41-5 7790-29-6 7791-11-9,
 uses and miscellaneous 10141-05-6 10325-94-7 10361-44-1 10377-51-2
 10402-29-6 10421-48-4 11118-27-7 12027-06-4 12124-97-9
 12125-02-9, uses and miscellaneous 12648-47-4 13444-76-3 13770-61-1
 14024-18-1 16283-36-6 18256-98-9 18268-45-6 20936-31-6
 21679-46-9 22750-54-5 25215-50-3 65597-30-0 65597-31-1
 65597-32-2
 RL: USES (Uses)
 (photothermog. copying compns. contg., for prepn. of electrog. masters)
 IT 57-11-4, uses and miscellaneous
 RL: USES (Uses)
 (photothermog. copying compns. contg., for prepn. of electrog. masters)
 RN 57-11-4 HCAPLUS
 CN Octadecanoic acid (9CI) (CA INDEX NAME)

HO₂C-(CH₂)₁₆-Me

L73 ANSWER 31 OF 34 HCAPLUS COPYRIGHT 1999 ACS
 AN 1977:123106 HCAPLUS
 DN 86:123106
 TI Hardenable coating **composition**
 IN Traenckner, Hans Joachim; Fuhr, Karl; Rosenkranz, Hans Juergen; Patheiger, Manfred; Rudolph, Hans
 PA Bayer A.-G., Ger.
 SO Ger. Offen., 43 pp.
 CODEN: GWXXBX

KATHLEEN FULLER STIC LIBRARY 308-4290

DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2534012	A1	19770217	DE 75-2534012	19750730
	DE 2534012	B2	19800731		
	DE 2534012	C3	19810514		
	GB 1492919	A	19771123	GB 76-31025	19760726
	JP 52017515	A2	19770209	JP 76-88757	19760727
	JP 59042704	B4	19841017		
	BE 844585	A1	19770128	BE 76-169297	19760728
	AT 350275	B	19790525	AT 76-5547	19760728
	AT 7605547	A	19781015		
	SU 679150	D	19790805	SU 76-2386903	19760728
	CA 1092285	A1	19801223	CA 76-258017	19760728
	DK 7603425	A	19770131	DK 76-3425	19760729
	NL 7608441	A	19770201	NL 76-8441	19760729
	NL 180114	B	19860801		
	NL 180114	C	19870102		
	SE 7608557	A	19770201	SE 76-8557	19760729
	SE 421706	B	19820125		
	SE 421706	C	19820506		
	ES 450265	A1	19771116	ES 76-450265	19760729
	CH 625257	A	19810915	CH 76-9728	19760729
	FR 2319690	A1	19770225	FR 76-23444	19760730
	FR 2319690	B1	19800523		
	BR 7604986	A	19770809	BR 76-4986	19760730
PRAI	DE 75-2534012		19750730		

AB **Resins** with high reactivity to radiation in the form of coatings but which can be stored with a min. amt. of increase in viscosity are manifd. by reaction of bisphenol A diglycidyl ether (I) [1675-54-3] with 0.01-0.5 NH equivs. NH₃(g), hexamethylenediamine [124-09-4], or .epsilon.-aminocaproic acid [60-32-2], 0.40-0.90 carboxy equivs. acrylic acid (II) [79-10-7], and 0.09-0.50 carboxy equivs. satd. aliphatic or cycloaliph. carboxylic acids per epoxy equiv. of I. Thus, 42.5 g NH₃(g) was introduced in 20 h into 6800 g I at 60.degree.. Thiodiglycol catalyst (68.4 g) was then added and in 2 hrs 1386 g II was added and in an addnl. 30 min 340 g AcOH [64-19-7] was added. The mixt. was stirred at 60.degree. until an acid value of 0 was observed and then mixed with 0.05% p-methoxyphenol to give a stabilized **resin**. Paper and carton were coated with 8-10 .mu.m high-gloss, colorless, non-yellow coatings using the above prepd. **resin** in EtOAc or BuOAc as solvents, benzophenone as **photosensitizer** and 30-80 watt high-pressure Hg-vapor UV lamps as a drying app.

IC C08G059-56

CC 42-8 (Coatings, Inks, and Related Products)

Section cross-reference(s): 43

ST radiation crosslinkable epoxy coating; aminated epoxy coating; carboxylic acid modified epoxy

IT Paper

Paperboard

(coatings for, radiation-crosslinkable epoxy **resin** derivs. as)

IT Coating materials

(radiation-curable epoxy **resin** derivs., for paper and building materials)

IT Paperboard

(chipboard, coatings for, radiation-crosslinkable epoxy **resin** derivs. as)

IT 7429-90-5, uses and miscellaneous

RL: USES (Uses)

(coatings for, radiation-crosslinkable epoxy **resin** derivs. as)

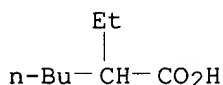
IT 60-32-2D, reaction products with bisphenol A diglycidyl ether, acrylic acid and acetic acid 64-19-7D, reaction products with bisphenol A diglycidyl ether, amines and acrylic acid 79-10-7D, reaction products with bisphenol A diglycidyl ether, amines and satd. carboxylic acids 98-89-5D, reaction products with bisphenol A diglycidyl ether, acrylic acid and ammonia 124-04-9D, reaction products with bisphenol A diglycidyl ether, acrylic acid and ammonia 124-09-4D, reaction products with bisphenol A diglycidyl ether, acrylic acid and acetic acid 149-57-5D, reaction products with bisphenol A diglycidyl ether, acrylic acid and ammonia 7664-41-7D, reaction products with bisphenol A diglycidyl ether, acrylic acid and satd. carboxylic acids
 RL: **TEM (Technical or engineered material use)**; USES (Uses)
 (coatings, irradiation-crosslinkable)

IT 1675-54-3D, reaction products with amines and satd. and unsatd. carboxylic acids
 RL: **TEM (Technical or engineered material use)**; USES (Uses)
 (coatings, radiation-crosslinkable)

IT 149-57-5D, reaction products with bisphenol A diglycidyl ether, acrylic acid and ammonia
 RL: **TEM (Technical or engineered material use)**; USES (Uses)
 (coatings, irradiation-crosslinkable)

RN 149-57-5 HCAPLUS

CN Hexanoic acid, 2-ethyl- (8CI, 9CI) (CA INDEX NAME)



L73 ANSWER 32 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1977:56547 HCAPLUS

DN 86:56547

TI Crosslinked **polymers**

IN Redfarn, Cyril A.

PA Engl.

SO Brit., 6 pp.

CODEN: BRXXAA

DT Patent

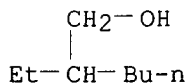
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 1441108	A	19760630	GB 73-3329	19740422
AB	<p>Pliable or rigid rubbery crosslinked polymers with controllable properties, suitable for the manuf. of printing plates, were made by copolymerizing a polyether-based polyurethane with HO(CH₂)₂O₂CCR:CH₂ (R = Me or H), and optionally with ethylhexyl alc. to provide internal plasticization, treating the product with a methacrylic monomer crosslinking agent, and curing the compn. by exposure to uv light in the presence of a photosensitizer. E.g., Adiprene L 213 400, ethylhexanol 24, and CH₂:CHCO₂(CH₂)₂OH 92 g were mixed and allowed to stand 1 week at room temp. A soln. of 0.34 g 9,10-phenanthroquinone and 0.04 g hydroquinone in 103 g CH₂:CMeCO₂Bu was added to the Adiprene reaction product and the sensitized compn. used to prepare a printing plate. The proportions were given of 4 Adiprenes, comonomers, and crosslinking agents to give products with hardnesses 7-110 (British Std. Softness, B. S. 2782).</p>				
IC	C08F283-00				
CC	38-4 (Elastomers, Including Natural Rubber)				
	Section cross-reference(s): 74				
ST	printing plate urethane rubber; polyether urethane printing plate; hydroxyethyl acrylate urethane rubber; methacrylate crosslinking urethane				

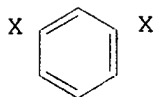
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rubber; ethylhexanol plasticizer urethane rubber
 IT Rubber, urethane, uses and miscellaneous
 RL: USES (Uses)
 (hydroxyethyl acrylate-modified, for photohardenable printing plates)
 IT Crosslinking agents
 (methacrylates, for acrylate-modified polyurethanes for printing
 plates)
 IT Printing plates
 (photohardenable compns. for, contg. hydroxyethyl acrylate- and
 methacrylate-modified urethane rubbers and methacrylic crosslinking
 agents)
 IT 818-61-1D, reaction product with polyether-based urethane rubbers
 868-77-9D, reaction product with polyether-based urethane rubbers
 RL: USES (Uses)
 (crosslinked, for photohardenable printing plates)
 IT 79-41-4, uses and miscellaneous 97-88-1
 RL: MOA (Modifier or additive use); USES (Uses)
 (crosslinking agent, for hydroxyethyl acrylate-modified urethane
 rubbers for photohardenable printing plates)
 IT 80-62-6
 RL: MOA (Modifier or additive use); USES (Uses)
 (crosslinking agent, for hydroxyethylacrylate- and methacrylate-
 modified urethane rubbers for photohardenable printing plates)
 IT 104-76-7D, reaction product with hydroxyethyl acrylate-modified
 urethane rubbers
 RL: USES (Uses)
 (rubber, plasticized crosslinked, for printing plates)
 IT 104-76-7D, reaction product with hydroxyethyl acrylate-modified
 urethane rubbers
 RL: USES (Uses)
 (rubber, plasticized crosslinked, for printing plates)
 RN 104-76-7 HCAPLUS
 CN 1-Hexanol, 2-ethyl- (8CI, 9CI) (CA INDEX NAME)



L73 ANSWER 33 OF 34 HCAPLUS COPYRIGHT 1999 ACS
 AN 1976:584854 HCAPLUS
 DN 85:184854
 TI **Photosensitive polyamide resin compositions**
 for printing plates
 IN Yamada, Masaaki; Akama, Tadashi; Iwamoto, Masao
 PA Toray Industries, Inc., Japan
 SO Japan. Kokai, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 51031504	A2	19760317	JP 74-101958	19740906
	JP 54041412	B4	19791208		
GI					



where X = $\text{---} \left[\text{CH}_2\text{N}(\text{CH}_2\text{CH}(\text{OH})\text{CH}_2\text{O}_2\text{CCMe}=\text{CH}_2)_2 \right] \text{I}$

- AB **Photosensitive resin** compns. consist of: (1) 100 wt. parts of a sol. polyamide **resin**; (2) 5-200 wt. parts of a monomer having .gtoreq.2 polymerizable unsatd. groups; and (3) 3-50 wt. parts of a C2-10 di- or trihydric alc. which may contain a NR (R = C1-4 alkyl, C1-14 hydroxyalkyl), O, CO, or CO2 linkages within the main chain. The **photosensitive resin** compns. have good resoln., and they yield relief images having good flexibility and good durability; hence they are useful for relief printing plate manuf. The relief images obtained with the compns. also have excellent edge sharpness. Thus, an alc.-sol. polyamide (Amiran CM 4000, from Toray) 100, I (obtained by reacting 4 moles glycidyl methacrylate with 1 mole m-xylenediamine at 50.degree. for 10 hr) 50, acrylamide 15, benzophenone 5, phenothiazine 0.02, and diethylene glycol 30 wt. parts were dissolved in EtOH (200 wt. parts) at 80.degree., the soln. was then coated on a polyester film and the resulting film was pressed on an Al plate at 160.degree. to give a **photosensitive** plate. The plate was then pattern exposed through a **negative** to a 3kW Hg lamp (at 65 cm) for 2 min, and developed with EtOH. The relief images obtained did not show any cracking during a bending test, while a control prepd. without diethylene glycol showed cracks, while the depth between the 300 .mu. wide images formed at 300 .mu. intervals was 140 .mu. vs 100 .mu. for the control.
- IC G03F007-02
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic Processes)
- ST polyamide alc **photosensitive** printing plate
- IT Polyamides, uses and miscellaneous
RL: PREP (Preparation)
(**photosensitive** compns. contg. polyhydric alcs. and, for relief printing plate prepn.)
- IT Alcohols, uses and miscellaneous
RL: PREP (Preparation)
(polyhydric, **photosensitive** compns. contg. polyamides and, for relief printing plate prepn.)
- IT Printing plates
(relief, **photosensitive** compns. contg. polyamides and polyhydric alcs. for)
- IT 79-06-1, uses and miscellaneous
RL: USES (Uses)
(**photosensitive** compns. contg. polyamide, diethylene glycol, and, for relief printing plate prepn.)
- IT 111-46-6, uses and miscellaneous
RL: USES (Uses)
(**photosensitive** compns. contg. polyamide, vinyl monomers, and, for relief printing plate prepn.)
- IT 92-84-2 119-61-9, uses and miscellaneous
RL: USES (Uses)
(**photosensitive** compns. contg. polyamide, vinyl monomers, diethylene glycol, and, for relief printing plate prepn.)
- IT 40902-58-7
RL: USES (Uses)
(**photosensitive** compns. contg. polyamides, diethylene glycol, and, for relief printing plate prepn.)
- IT 25191-90-6
RL: USES (Uses)

(**photosensitive** compns. contg. vinyl monomers, diethylene glycol, and, for relief printing plate prepn.)

IT 1477-55-0
RL: RCT (Reactant)
(reaction of, with glycidyl methacrylate)

IT 106-91-2
RL: RCT (Reactant)
(reaction of, with xylenediamine)

IT 111-46-6, uses and miscellaneous
RL: USES (Uses)
(**photosensitive** compns. contg. polyamide, vinyl monomers, and, for relief printing plate prepn.)

RN 111-46-6 HCAPLUS

CN Ethanol, 2,2'-oxybis- (9CI) (CA INDEX NAME)

HO-CH₂-CH₂-O-CH₂-CH₂-OH

L73 ANSWER 34 OF 34 HCAPLUS COPYRIGHT 1999 ACS

AN 1975:450777 HCAPLUS

DN 83:50777

TI **Photosensitive** recording material

IN Uehara, Takeshi; Adachi, Kinichi; Shimizu, Hisao

PA Matsushita Electric Industrial Co., Ltd.

SO Japan., 5 pp.

CODEN: JAXXAD

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 49020214	B4	19740523	JP 70-82321	19700919

GI For diagram(s), see printed CA Issue.

AB A photopolymerizable color-forming **compn.** for photog. image prodn. which can be thermally fixed is prepd. from a vinylcarbazole deriv. (I; R₁, R₂ = H, halo, alkyl or alkoxy), a color coupler, and an org. halogen compd. as the photopolymn. initiator. Thus, a 0.2 mm Al sheet was coated with a **photosensitive compn.** prepd. from 3-iodo-9-vinylcarbazole 6, .alpha.,.alpha.,.alpha.-tribromoacetophenone 4.7, butadiene-styrene **polymer** 1, triphenylphosphine 0.001, benzoic acid 0.001 and THF 40 parts as a 4-5 g/m² dry layer, exposed to a 75-W Xe lamp at 20 cm through a neg. film for 30 sec, and heated at 140.degree. for 2 min to produce a dark green pos. image having D_{max} = 1.41 and D_{min} = 0.13.

IC G03C; G03G

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST photopolymerizable vinylcarbazole halogen photog

IT Photography

(photopolymerizable **compn.** contg. vinylcarbazole deriv. and org. halogen compd. for)

IT 21551-78-0

RL: USES (Uses)

(photopolymerizable **compn.** contg. halogen compd. and, for photog. images)

IT 7402-45-1

RL: USES (Uses)

(photopolymerizable **compn.** contg. vinylcarbazole deriv. and, for photog. images)

IT 65-85-0, uses and miscellaneous 603-35-0

RL: USES (Uses)

(photopolymerizable **compn.** contg. vinylcarbazole deriv., org. halogen compd., and, photog. images)

KATHLEEN FULLER STIC LIBRARY 308-4290

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IT 65-85-0, uses and miscellaneous
RL: USES (Uses)
(photopolymerizable **compn.** contg. vinylcarbazole deriv., org.
halogen compd., and, photog. images)
RN 65-85-0 HCAPLUS
CN Benzoic acid (7CI, 8CI, 9CI) (CA INDEX NAME)

